Double Degree MSc in European Governance

Master Thesis

External Just Transition

An Assessment of the External Socio-Economic Effects of the EU Climate Policy in the Case of Moldova

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CEF	Connecting Europe Facility
CFR	Charter of Fundamental Rights
CoE	Council of Europe
COM	European Commission
DCFTA	Deep and Comprehensive Free Trade Area
EaP	Eastern Partnership
EGD	European Green Deal
ENP	European Neighbourhood Policy
EPSR	European Pillar of Social Rights
ESC	European Social Charter
EU	European Union
EEAS	European Union External Action Service
ETS	Emission Trading System
Fig.	Figure
HR	Human Rights
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
IL	International Law
ILO	International Labour Organization
IPA	Instrument for Pre-Accession assistance
MD	Moldova
MDL	Moldovan Lei
MPEO	Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights
MRV	Monitoring, Reporting, and Verifying
MS	Member State
NDICI	Neighbourhood, Development and International Cooperation Instrument
Q1	First quintile
Q5	Fifth quintile
RES	Renewable Energy Source
RQ	Research Question
SDG	Sustainable Development Goal
SME	Small and Medium Enterprise
SQ	Sub-Question
Tbl.	Table
TEN-T	Trans-European transport network policy
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
UNDP	United Nations Development Programme

1. Introduction

The European Union (EU) has started as a nearly exclusively economic project, but throughout the years, it has increasingly developed into a significant political and normative actor (Simonis, 2011).

This development has only increased with the recent crises, where the EU seized the chance to show that they indeed intend to become a "geopolitical EU". And the EU does have the potential for significant influence. It has a close and complex net of relations, policies, and treaties with third countries, especially in the immediate neighborhood. The design and implementation of these external policies and relations can have significant impacts on the economic and social situation in these third countries, even in ways which the EU might not intend to.

And the EU has shown ambitions to use their power also to advance their own values outside. The current President of the Commission declared in her inaugural speech that the Commission intends to be "a force for peace and for positive change" (von der Leyen, 2019).

But despite these strong words, there is a lack of clarity of what this "positive change" should look like. Regarding its internal policies, the EU is increasingly following a "Just Transition" approach, following the awareness that for a truly "positive change", the three goals of climate protection, economic development, and social considerations must be pursued together, that developments in one inevitably affect the developments in the others, and that policies must be designed with that interconnection in mind.

But regarding the EU's external policies, this Just Transition approach is considerably less developed. The significant impact the EU can have on the social, economic, and environmental developments in its partner countries paired with a lack of a strategy on how to consider their interconnections leads to the risk of having policies in one area having unintended negative consequences in one of the other areas, and it increases the risk of missing the chance to utilize potential synergies between the policies.

This thesis explores this field of External Just Transition through first providing an interdisciplinary conceptualization of what External Just Transition would mean in this context.

Second, it analyzes the current implicit external Just Transition policies in one exemplary case. The EU has particularly close connections to the countries in its neighborhood. Especially the three EaP countries Ukraine, Georgia, and Moldova have recently intensified their relation to the EU significantly. Georgia has not yet gained the EU candidate status and Ukraine is due to the current situation not a suitable example for the EU's external policies. This thesis will therefore analyze the impact of the relevant policies through the case of Moldova.

It answers the research questions:

RQ: How does the external EU Just Transition Regime impact the wealth distribution in Moldova?

The first part provides the theoretical framework, it establishes the understanding of "Just Transition" and of "external Just Transition", thereby justifying the focus on wealth distribution, and it presents the theoretical understanding of how the impact of policies on wealth distribution can be analyzed.

The second part uses this framework to analyze the impact in Moldova. It finds that within the definitions of this paper, the external EU Just Transition regime has a slightly progressive impact on the wealth distribution in Moldova.

2. Relevance

The thesis takes a somewhat unconventional route of research. It first explores a number of concepts which allows it to finally answer the research questions. This has the advantage of providing insights into multiple aspects. The different concepts elaborate on different gaps in literature, making the thesis and its chapters relevant to multiple societal and scientific actors.

The first **gap in literature** concerns the term “Just Transition” in general and “external Just Transition” in particular. To the best of my knowledge, no comprehensive legal analysis of the international understanding of the terms exists as of yet. There is some scholarship emerging on the responsibilities of states towards internal Just Transition, and in the area of climate protection, there is some elaboration on potential external obligations. With the “MPEO” there is an international understanding on external social obligations emerging, but concerning states, not the EU. The specifics of the current legal and academic are detailed in chapter 4.1 and 4.2.

Societal relevance: These insights can be useful to the EU. The actions of the EU are bound to and embedded in international law and especially in EU law. A substantiated understanding of the EU’s responsibilities in the area of external Just Transition and external social obligations is therefore essential to act in accordance with its own responsibilities.

Scientific relevance: The analysis could mostly be useful to legal scholars in the field of international social rights. There is sparse but growing legal scholarship on external social responsibility of states and extensive scholarship on responsibility of EU towards its own citizens, the analysis of this thesis bridges this gap with an analysis of the EU’s external social responsibility.

The second **gap in literature** concerns the theory behind a policy’s impact on wealth distribution.

The existing literature shows significant differences between the disciplines. There are a number of papers in the field of political science, anthropology, or similar which provide musings on different aspects of and consequences of wealth inequality, which would be near impossible to operationalize. Economic papers on the other hand are mostly very specific, looking at specific dynamics, and specific variable, but with little room to generalize from them, or to utilize them for an analysis of wider effects.

The one model I found suitable for my intended purpose was Shang (2023) which still lacks the specific operationalizations of the concepts described. Other literature provides specific enough insights to allow for the operationalization of those concepts. The details of these papers are discussed in the first paragraphs of sub-chapter 5.1.

Societal relevance: This model can be useful to all kind of policymakers as well as organizations involved in the policy making process. Many policies do have a declared intent to provide particular support to the poorest people and want to shield them from having to bear a disproportionate share of the burden.

But they are often not explicitly targeted, and the indirect impact pathways can be very complex and intricate. The model offers a simplification of the pathways and a way to conceptualize impacts in an analyzable way.

Scientific relevance: The model and the pathway of its conceptualization can be useful to academics who also want to explore the social and economic (side-) effects of climate policies. My analysis provides both an insight into what has already been researched and a way to operationalize the characteristics most relevant to the final effect.

The next contribution to the literature is less a closing of a gap of knowledge but rather a plain **literature review**. While the research on the theoretic connection between climate policies and their socio-economic is rather limited, as stated above, the empirical research is a bit more fruitful. Chapter 5.2 provides a review of these analyses, summarizing their findings in the light of the observed effects on wealth distribution. For the full literature review see the respective chapter, but in summary, it is a not yet that vast a collection of analyses, but it is increasing, with near all of the reviewed literature having been published within the last five years. The most prominent source is the latest IPCC report.

Societal relevance: This summary is again useful for any governing body which considers implementing any of those specific policies. The drawback of these empirical insights is that they have a lower generalizability compared to the theoretical framework, but they also have a higher reliability.

Scientific relevance: The summary is useful for researchers who wither want to do their own empirical research, as a summary of already existing insights, or for someone who also wants to supplement their theoretical analysis with empirical insights.

The next contribution is reversely the closing of a **gap in knowledge** without a real gap in literature. Chapter six collects the relevant data of the economic and social situation in Moldova through the lens of the established theoretical framework.

Societal relevance: This can be useful for both EU and Moldovan policymakers. While looking through a quite particular lens, the data presents a comprehensive insight into the wealth distribution in the country and its influencing factors. A solid knowledge of these characteristics is essential to policymakers who intend to impact the wealth distribution, or the level of poverty, through anything more complex than direct financial handouts.

Scientific relevance: These insights could be useful for academics who want to research into this very particular topic, but is otherwise probably of very limited scientific relevance.

The next **gap in knowledge** concerns the policy regime between the EU and Moldova. There is next to no academic literature summarizing and contextualizing the set of external EU policies to any country, or group of countries. Most of the information is thereby based on the communications of the EU itself. They do publish an abundance of very detailed information regarding very specific instruments, and an abundance of information about their very broad goals, but a surprising lack of information about the overview of policies implemented. The conceptualization provided by the thesis is of course heavily informed by the specific angle of external Just Transition, but within that context it provides a concise overview that does not yet exist in this form.

Societal relevance: This summary can be useful for actors and organizations in the orbit of the EU and within the thematic sphere of climate protection and socio-economic development. It can help inform changes to the current system by presenting what is already there, what topics are already covered and how, and how different policies are interconnected.

Scientific relevance: This summary can be useful to political scientist who might want to conceptualize a similar regime in the context of their specific research, and it could also be adapted to depict the regime with other EaP countries.

The final **gap of knowledge** tackled by the thesis regards the actual research question. There is no literature yet specifically on how the external EU Just Transition impacts the wealth distribution in Moldova. This is unsurprising since it takes nearly a full master thesis to establish, delineate, and explore the concepts that make up the precise scope of the research question. Nevertheless, there is surprisingly little literature on the specific economic effects of specific EU policies. Most of the specific information comes from reports commissioned by the EU, which have an inherent risk of being less objective. Their details are discussed in the "Analysis" paragraphs of the sub-chapters 7.2.1, 7.2.2, and 7.2.3.

Societal relevance: The answer to the research question can be useful mostly to the policymakers of the EU responsible for the policies with the EaP and with candidacy countries. The EU's relation to Moldova is rapidly evolving at the moment. The recent granting of candidacy status means that some instruments must be changed, some new tools can be utilized, and others will become obsolete.

The analysis shows that the instruments in place are not able to deliver on the intentions declared. The overview of the current regime in place provides insights for improvements in the upcoming redesign.

Scientific relevance: The rather peculiar approach of the whole thesis could provide both specific insights to researchers, as elaborated above, and it could provide inspiration for how to set up and structure similar research into other effects of EU external policy, or similar research into the effect of external EU Just Transition policies on another country.

3. Method

3.1 Research Design

The research is divided into four sub-questions (SQ), which each analyze a specific aspect of the overarching research question. The first and second sub-questions constitute the first part, the third and fourth sub-question the second part of the thesis. Each sub-question is analyzed in one chapter.

Chapter four provides a detailed analysis of the term "Just Transition", highlighting which social and economic developments are understood to be targeted within the concept of Just Transition. It answers the first sub-question:

SQ1: What socio-economic aspects of Just Transition does the EU target with their external policy?

The first sub-chapter presents how the international arena at large understands Just Transition, through an analysis of the respective legal texts and declarations. It finds widely varying definitions, one especially prominent definition comes from the guidelines of the ILO, encompassing decent work, social inclusion, and the eradication of poverty. The second sub-chapter presents how the EU itself understands Just Transition in the context of effects outside its borders. The central targets of the EU are the increase in the level of employment, the reduction of poverty, the strengthening of social cohesion, and the strengthening of Rule of Law. The third sub-chapter narrows down the scope of the overarching analysis and derives a central indicator for all these aspects. It argues that wealth distribution is the most appropriate indicator.

Chapter five provides a detailed analysis on the "impact on wealth distribution" within the research question, answering the second sub-question:

SQ2: How can climate policies impact the distribution of wealth within an economy?

Building on the indicator established in the second chapter, this chapter elaborates on the mechanism behind the effect of policies, whether intentional or unintentional. The first sub-chapter presents general impact pathways of how a structural climate policy can affect the wealth distribution within an economy. The impact pathways are conceptualized through a differentiation between the consumption channel, the income channel, and the revenue recycle channel. It concludes with a model of how a climate policy can impact wealth distribution including a list of the most relevant characteristics of both the policy and the economy in which the policy is implemented.
The second sub-chapter summarizes empirical research on the distributional effects of climate policies within the policy sectors presented as central to the EU climate strategy. It concludes with an overview of central types of climate policy instruments and their expected effect on wealth distribution, finding that they tend to initially have a regressive effect.
Chapter five provides the theoretic framework for the next chapters.

Chapter six provides a detailed analysis of Moldova in the context of the findings of the previous chapter. It answers the third sub-question:

SQ3: How do the relevant socio-economic characteristics manifest in Moldova?

The first sub-chapter analyzes how the characteristics determined in the third chapter manifest in Moldova. Following the categorization of chapter five, this sub-chapter first presents how the contextual factors manifest, second how the characteristics impacting the consumption channel manifest, third how the characteristics impacting the income channel manifest, and fourth how the characteristics impacting the revenue recycle channel manifest.

The second sub-chapter presents the level of Rule of Law in Moldova with a special focus on the EU's stated evaluation on the situation in Moldova.

The chapter concludes with a table summarizing the results.

Chapter seven provides an analysis of the "Just Transition Regime" within the overarching research question, answering the fourth sub-question:

SQ4: What is the Just Transition Regime of the EU towards Moldova?

Chapter six highlights the specific goals pursued. This chapter builds on these insights and details the form of policies in place to pursue those goals specifically within the EU – Moldova relations. The term "Just Transition Regime" denotes the sum of the actually implemented policies between EU and Moldova which fall within the scope of the EU's implicit understanding of external Just Transition[1].

The first sub-chapter provides a list of criteria to characterizes the type of EU policies which should be included into the concept of "Just Transition Regime". The second sub-chapter collects and presents the major policies implemented between the EU and Moldova which meet these criteria. It categorizes the policies into internal climate policies with external effects, external policies with climate objectives, and the approximation to the EU. In each category, the policies and their supporting instruments of each category are first described, followed by an analysis of how this policy can be expected to affect the wealth distribution. The analyses are based on the theoretic framework of chapter five. Each analysis presents how the policy characteristics manifest, supplemented with insights from relevant reports and literature.

The collection of policies and their descriptions are summarized in a figure and provides the answer to the fourth sub-question. The sum of the analyses provides the answer to the overarching research question.

RQ: How does the external EU Just Transition Regime impact the wealth distribution in Moldova?

It finds that the external EU Just Transition Regime impacts the wealth distribution in Moldova by impacting the price of consumer goods, the income of the workers, and the governments capacity to finance social expenditure. Within the scope of the research, it finds that the effect on wealth distribution is overall slightly progressive.

The final **chapter eight** concludes. It summarizes the results, interprets them in light of the wider context and potential generalizations, reflects on the limitations and the corresponding potential further research, and suggests policy recommendations based on the insights gained.

1 For further clarifications see the next sub-chapter on the scope of the thesis.

This is a relatively complex setup of information building on each other and extensively referring back to the insights gained in previous chapters. To enable a better readability and to make it easier to find the most relevant results, the central insights are summarized in tables on the right-hand side, next to the respective part of the text. Only that information is reiterated in tables that is a part of the argument later on in the text.

3.2 Research Methods

The topic of external Just Transition is analyzed through an interdisciplinary case study. Both the form and the effect of EU policies in the area of external Just Transition are highly dependent on the country they are directed towards; a case study therefore allows for a more detailed and comprehensive analysis within the scope of a Master thesis.

The EU has particularly close connections to the countries in the southern and eastern neighborhood. The Russian invasion of Ukraine put particular focus on the countries of the Eastern partnership (EaP), leading to increased support and closer relation. Within the EaP, this increased orientation towards the EU mostly concern Ukraine, Georgia, and Moldova, which have declared aspirations to eventually join the EU. Ukraine would be an unsuitable case to study due to the ongoing war and Georgia is not yet as close to the EU, having not yet been granted the candidacy status. This leaves Moldova as the most appropriate case. An additional advantage of Moldova as a case is the particular asymmetry of their relation, giving the EU an exceptionally large influence over the form and content of the Just Transition regime. Economically, Moldova is very small and comparatively very poor, with the EU as its biggest trading partner, accounting for about half of Moldova's trade (European Commission, 2022d). Politically, the recent granting of the EU candidacy status in combination with Moldova's increased internal orientation towards the EU allows the EU particular influence over Moldovan legislation and policy making. This dominance of the EU in the decision-making process behind the policies allow for the assumption that the EU had a particularly large advantage in the negotiation of their policies, and that the policies in place are thereby largely correlating to the "ideal" form and content, from the perspective of the EU. The form and content of the analysed policies can therefore be more easily generalized to regimes towards other countries. The implications of the research and the potential generalization are discussed in chapter eight.

The four SQs are answered through different methods. **Chapter four** answers SQ1 through a legal analysis of the central treaties, declarations, and commitments. The legal setup clearly states which text the EU is bound to, the extend of their applicability, and the therefrom deriving obligations. Any similar research exploring the obligations and targets of the EU regarding external Just Transition should therefore result in a very similar to identical selection of legal texts and to a very similar selection of relevant articles. The interpretation of their relevance and final conclusion could be of course argued differently. The question of validity is not really applicable in a legal analysis.

Chapter five answers SQ2 through an analysis of political-economic literature. The conceptualization of the theoretical mechanisms behind wealth distribution and the economic impacts of climate change is primarily

based on the papers by Shang (2023) and Fullerton and Heutel (2007). The theoretical conceptualization is supplemented by insights of papers providing empirical research on the factors deemed to be most relevant by the theoretic considerations. The analysis of the empirical research is based on the latest IPCC report, a 2021 report by the Climate Action Network Europe, a 2021 report for the European Environmental Agency, and a 2018 report by the EU DG on Employment.
The choice of theoretical conception is based on what I found most applicable to the wider research question, but similar research into this area could also well argue for a different conceptualization. The substantiation of the theoretical concepts with the respective empirical research should be replicable in similar research. The choice of using wealth distribution as primary indicator is justified in detail in chapter 4.3.

Chapter six answers SQ3 through descriptive analysis of mainly the dataset provided by the Moldovan National Bureau of Statistics and from the database of the world bank. The presentation of the markers of Rule of Law is based on the assessments of the EU within the candidacy process. The analysis focuses on the differences between the poorest 20% and richest 20% of Moldovan households. This approach allows for a comparison of two groups, facilitating the application of the theoretical perspective of chapter five. The comparison of the two quintiles, and not for example the two outer deciles, also encompasses a greater amount of the population and is thereby less likely to be distorted by outliers, while still allowing for a greater difference of the groups and their characteristics then a comparison of, for example, the poorer and richer half, which might obscure important differences. The dataset itself always presents the how the respective characteristics manifest in all five quintiles. If the value distribution is not linear, i.e., higher or lower for the middle compared to the extremes, then the text will refer to it. Under the assumption that the dataset is viable, and the choice of analysed characteristics is adopted, similar research should come to the same conclusion.

Chapter seven answers SQ4 through a descriptive collection and interpretation of EU policies. The collection follows a list of criteria building on the insights of all previous chapters and the selection and description of the policies and their instruments are based on the documents published by the Commission and are gathered through a snowball system. I start at the central documents of each sub-chapter: the EGD, the Association Agreement, and the Commission opinion granting the candidacy status. From there I collect all central policies, instruments, and declarations mentioned and analyze whether they meet the criteria of chapter 7.1. I follow the references until I find no more new and relevant policies. Second, I go through the recent publications of the EU institutions on Moldova and on external climate policies to ensure to include the developments since. Third, I go through the press releases of the website of the government of Moldova [2] as well as its own presentation of the Moldova – EU relations[3] to supplement the strong EU-focused approach with the Moldovan perspective. This approach rests on the assumption that the EU is very vocal about its achievements and its actions, and that each policy refers extensively to related and similar policies. Of all policies found, only those are presented that fit the criteria. Chapter eight includes reflections on these chapter specific methods, deliberating their advantages and disadvantages.

2 https://gov.md/en/comunicate-presa last visited on 20th of June 2023.
3 https://mfa.gov.md/en/content/moldova-eu-relations last visited on 20th of June 2023.

In general, this approach has the advantage of allowing for a very comprehensive analysis based on multiple complex concepts and new developments. The answer to the research question is thereby only a part of the results, accompanied by the results of the sub-questions. The disadvantage of this approach is that it requires a significant amount of discretion on my part in delineating and interpreting these concepts and developments in light of the respective literature. This makes the validity of the final result strongly dependent on the persuasiveness of the first arguments.

3.3 Scope

I aim to use concepts and terms as consistently as possible to allow for a clearer and more concise read. I therefore restrict the scope of the research question as well as of certain terms to a narrower meaning, even if the terms could be understood more broadly in their general meaning.

The **temporal** scope: The analysis in chapter seven includes developments up to May 2023. Chapter six on the other hand will mostly describe the social and economic situation in Moldova in the year 2021. The first half of 2023 as well as the year of 2022 saw drastic developments both within Moldova and within its relations to the EU, but there is not yet an as comprehensive set of data and mass of analyses for these years.

The **territorial** scope: The analysis generally excludes the area of Transnistria. The disputed area of Transnistria is not officially recognized by neither the Moldovan government nor by the EU. But it acts de-facto mostly autonomously, with its own administration and economic and social peculiarities. Its exclusion in this paper is just due to practical reasons and should not be understood as a political assessment either way. Large parts of the analysis are based on the statistics of the Moldovan government, and they exclude those regions, and so do most of the EU documents. If a paragraph does refer to Moldova including all the disputed regions, it will be explicitly noted in the text.

The term "**Just Transition**" is explored in detail in chapter four. At its core, it refers to a development that aims at three goals at once, climate change mitigation, economic development, and social equity. Developments that aim at only two of those goals are usually called differently, see figure 1. For this paper, "Just Transition" concerns exclusively the effect of climate policies on the socio-economic development and thereby does not concern the effect of economic development on climate justice or the effect of social equity on green growth.

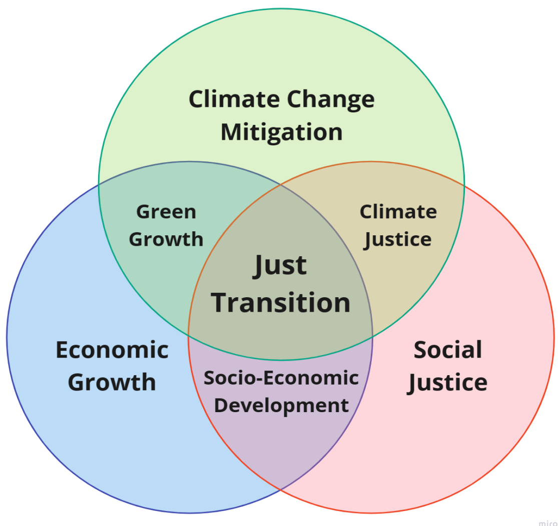

Fig. 1. Goals Just Transition, by author

The term "**Sustainable Development**" is codified in the 2030 Agenda of the UN. It includes all three Just Transition goals as well as a host of other goals. They are therefore not identical, but Just Transition is also a somewhat newer term. For older sources, this paper will understand a call for sustainable development to be comparable to a call for Just Transition.

"**Inequality**" refers to wealth inequality between members of the same polity. If it concerns other forms such as income inequality or gender inequality, then it is explicitly stated as such.

Wealth inequality and income inequality are closely connected. Wealth can be simplified as the level of income plus the level of previously owned income minus the level of spending. Chapter 4.3 argues why wealth inequality is at the center of the research, and not income inequality. But income inequality nevertheless plays a central role in the analysis. On one hand, a since income is an integral part of the factors impacting wealth, a change in income directly affects the level of wealth. On the other hand, income equality is a significantly more prominent measure in both databases and in literature. For this reason, if not stated otherwise, this paper assumes that an increase in income equality indicates an increase in wealth equality. The level of change must not be identical, but the direction of change is assumed to correspond.

"**Climate Policy**" is understood to include both climate- and environmental policies. Due to the focus of the RQ, "Climate policies" also denote only those policies which have a reasonable potential to affect the economy or the social development.

"**Mitigating action**" refers to actions mitigating the negative socio-economic consequences of a policy, not those mitigating climate effects.

The **EU** is understood as one singular actor, without any consideration of the internal coordination. "Abroad", "external", and "internal" are similarly understood as outside or inside the EU.

Regime, Policy, Instrument, Mechanism: There is not one universal definition or delieanation for these terms. For this paper, "regime" means the collection of policies contributing to the same goal, irrespective whether those policies were designed with each other in mind or not, and whether or not they intend to impact the goal or not. E.g., the EU external Just Transition Regime is the collection of all actions impacting the external Just Transition. "Policy" is narrower, with a specific goal, and generally based on one specific declaration or foundational legal text. E.g., the EGD is considered a policy. "Instruments" are all the even narrower actions that contribute to the policy's goal and are explicitly designed with the respective policy in mind. E.g., the Emission Trading System (ETS). "Mechanism" refers to a dynamic not caused by a policy-makers action, but by the setup of the economy or society. E.g., that an increase in gas prices leads to a decrease in demand.

Effect: An effect implies that a policy leads to a result that differs from a baseline-scenario. The baseline in this thesis is the current state, not the expected future state without the policy in question. A climate policy might, e.g., protect the environment and also lead to higher food prices compared to now. In a future without the policy, the not-protected environment might cause an even higher increase in food- prices. In this paper, I would still denote this policy to have a "negative" effect on food prices.

Competences is understood in the legal sense, indicating that the actor in question is legally allowed to do the action in question. It is no indication whether the action is done well or whether the goal is achieved. **Significant** is understood in the colloquial sense, not in the statistical. **Regressive** and **progressive** are understood in the economic sense, an effect is regressive if it increases the wealth inequality, an effect is progressive if it decreases the wealth inequality. This paper also gives those effects the normative judgement of regressive being "negative" and progressive being "positive" and desirable.

4. Socio-Economic Targets of Just Transition

This chapter provides an analysis of the term "Just Transition". The overarching research question aims to analyze the impact of the EU Just Transition Regime. To answer this question, this chapter first delineates and defines the term Just Transition. In particular, it aims to provide a substantiated understanding of what social and economic developments are assumed to be targeted within the concept, in order to allow for an analysis and assessment in the later chapters.

By now, the need for and the commitment to "Just Transition" or "sustainable development" is proclaimed by most international organizations, including the EU. It seems it has reached the global "mainstream". These commitments include not only the proclamations that each of the three goals (climate change mitigation, economic development, and social equity) are important values in themselves, but also the acknowledgement that the three are interconnected and mutually dependent. Despite this general agreement, there is still quite an ambiguity in what exactly these terms mean, what specific aspects of "socio-economic development" are likely affected by climate policies, and to what extent are states responsible for these effects outside its borders? These questions are analyzed to answer the first sub-question:

SQ1: What socio-economic aspects of Just Transition does the EU target with their external policy?

The first sub-chapter focuses on the general understanding of Just Transition, presenting which social and economic aspects the relevant international organizations and agreements declare to target.

The second sub-chapter focuses on the EU's approach to external Just Transition and highlights which social and economic aspect the EU aims to promote abroad. Most international declarations as well as most literature assumes, implicitly or explicitly, that the analyzed Just Transition policy originates from the same polity as the polity which they affect. While the origin should not matter for the mechanisms and impact pathways discussed in the next chapter, this differentiation does matter for the ambitions, the scope, and especially the aims of the policies analyzed. Both the competencies of the EU as well as the principle of national sovereignty and other general principles of international law limit the form and scope of policies that can be implemented. For example, the EU might be able to spend certain funds on EU projects, but not on projects benefitting Moldova. Additionally, a democratically legitimated governing body is primarily responsible for and dependent on the perception and wellbeing of its own constituents. It can therefore be expected that the policymakers of one political system are less incentivized to optimize the impacts of their policies on the citizens of another political system. In our case, the EU might feel less responsible to counter energy poverty in Moldova than in a MS, even if the energy poverty is (partly) a result of EU policies. There is not one specific document, communication, or strategy declaring which Just Transition effect the EU intends to have outside its own borders. This sub-chapter therefore derives these intended effects from the EU's legal framework.

The targets declared by the different organizations and by the different legal texts are summarizes in tables on the rights hand side, next to the relevant text. The content of all those tables presents the foundation for the argument of what constitutes Just Transition in general, and in the context of this paper.

The third sub-chapter narrows the aspects even further down. Despite not being a particularly prominent explicit goal, I argue that wealth distribution is an aspect closely connected with most of the goals explicitly stated and is therefore the most appropriate single indicator for the further analysis.

4.1 The Central Targets in the International Arena

The term "Just Transition" originated in the 1070s from US trade unions, with special involvement of the Union of Oil, Coal, and Atomic Workers (Stevis & Felli, 2015). They emphasized that the cost of the transition to a greener economy should not be solely borne by the workers in these sectors and that the government should provide support to these workers in the form of compensation, social protection and/or re-training (Blattner, 2020). Over time, the approach expanded to unions in other sectors and other countries, as well as to climate activists. While widening the scope of their approach, the core of their message continued to be the need to combine both environmental protection and labor protection (Wang & Lo, 2021). Naturally, these movements prioritized employment and working conditions as the main aspects of socio-economic development that Just Transition should target.

With the diffusion of the concept to other actors and other countries, the scope continuously increased, including aspects such as food justice, green gentrification, and energy sovereignty (Wang & Lo, 2021). This is mirrored in the development of an additional, separate concept of a just energy transition. Energy is a ubiquitous element of our economy as well as one of the main sources of harmful emissions, and as such energy is one of the most fundamental issues of climate change mitigation. A transition to clean and green energy does not only affect the workers working in those sectors, it affects the economy as such. Therefore, the concept of just energy transition includes the aspects of distributional, procedural, and recognition justice (García-García et al., 2020). Distributional justice refers to the distribution of the costs and benefits of the transition within the society, both in the production and within the consumption of energy. Procedural justice refers to the process of creating the policies and the compensatory mechanisms. Recognition justice demands the examination of who is affected, how, and through which ways (Wang & Lo, 2021).

The international efforts to push for a joint strategy towards both environmental and socio-economic objectives culminated in 2015 where the concepts got codified in three major global agreements.

<u>2030 Agenda for Sustainable Development</u>

The 2030 Agenda for Sustainable Development does not mention the specific term of Just Transition, but it reiterates its material contents. The very first sentence already mirrors the three goals of Just Transition:

"This Agenda is a plan of action for people, planet and prosperity." (2030 Agenda, 2015).

The thereafter listed sustainable development goals (SDGs) contain multiple relevant objectives, most notably in goal 8, 7, and 1 (Just Transition Center, 2017).

Targets in the 2030 Agenda
01. No Poverty
02. Zero Hunger
03. Health and Well-being
04. Quality Education
05. Gender Equality
06. Clean Water
07. Affordable Energy
08. Decent Work and Economic Growth
09. Industry, Innovation, and Infrastructure
10. Reduced Inequality
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice, and Strong Institutions
17. Partnership

Tbl. 1. Summary Targets Agenda 2030

"Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (2030 Agenda, 2015)

This goal mirrors the aspects of socio-economic development highlighted by the unions, a high level of employment and good working conditions.

"Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all" (2030 Agenda, 2015)

This goal mirrors the above discussed socio-economic aspect of energy access, thereby including the consumers into the scope of Just Transition.

"Goal 1. End poverty in all its forms everywhere" (2030 Agenda, 2015)

This is arguably an especially broad scope. But while these three goals in particular reflect the targeted aspects of Just Transition as presented by different sources, all 17 SDGs can be interpreted as aspects of the socio-economic development that Just Transition should aim at supporting, listed in table 1.

Paris Agreement

The second international agreement of note is the Paris Agreement on combatting climate change. It intends to work in tandem with the objectives of Agenda 2030, in the article on the objectives of the agreement, it states that it "aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty" (Article 2 Paris Agreement, 2015). In its preamble it explicitly refers to Just Transition, stating that it:

Targets Paris Agreements
• Level of Employment • Quality of Employment

Tbl. 2. Summary Target Paris Agreement

"Tak[es] into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities" (Paris Agreement, 2015).

This phrasing clearly mirrors the narrower understanding of Just Transition, presenting the level of employment and the quality of the work environment as the main socio-economic aspects to be targeted by Just Transition, see table 2.

ILO Guidelines

While the Agenda 2030 and the Paris Agreement declare broad lists of very ambitious objectives which the whole world should stive towards, the third international declaration of note comes back to the more specific details of Just Transition. The "Guidelines for a just transition towards environmentally sustainable economies and societies for all" is a document by the International Labour Organization (ILO) and is to this day one of the central documents codifying the international understanding and definition of "Just Transition" (Just Transition Center, 2017). And this document seems to take a broader understanding of the socio-economic aspects which ought to fall under Just Transition. It explicitly includes the goals of decent work, social inclusion, and the eradication of poverty, highlighted in table 3. Broader, Just Transition should work towards an economy which is sustainable economically, socially, and environmentally.

Targets ILO
• Decent Work • Social inclusion • Eradication of Poverty

Tbl. 3. Summary Target ILO

"A just transition for all towards an environmentally sustainable economy (…) needs to be well managed and contribute to the goals of decent work for all, social inclusion and the eradication of poverty." (Article 4 International Labour Organisation, 2015).

"Sustainable development means that the needs of the present generation should be met without compromising the ability of future generations to meet their own needs. Sustainable development has three dimensions – economic, social and environmental – which are interrelated, of equal importance and must be addressed together." (Article 2 International Labour Organisation, 2015).

The goal of decent work for all is further defined in Article 1, which proclaims the four pillars of decent work: social dialogue, social protection, rights at work, and employment.

Other Declarations

Other international declarations and memoranda further clarify how their respective organizations understand "Just Transition". Most fall somewhere between the quite narrow understanding of the Paris Agreement and the very broad understanding of the 2030 Agenda. They generally reaffirm the three focal points of the ILO guidelines, though with different emphases.

The **EGD** centers the need for Just Transition, but provides little specific information what it means by that. It centers the phrase "leaving no one behind", with both the Just Transition Mechanism and the Just Transition Fund primarily intended to protect the most vulnerable sectors, communities, and regions, mostly through financial compensation, striving to "to protect the citizens and workers most vulnerable to the transition, providing access to re-skilling programs, jobs in new economic sectors, or energy-efficient housing" (COM, 2019; European Commission, n.d.-e). The EU working document on the "employment and social impacts of climate change policies" highlights the impacts on the level of employment; the types of jobs and the respective required skills; energy poverty; and air pollution. They also include distributional considerations and the need for social acceptance of the measures, but seemingly more as a means to ensure the political feasibility and longevity of the climate measures (DG EMPL, 2018). Summarized in table 4, the EU appears to center protection of the "most vulnerable", employment and social acceptance.

Focus EU
• Protecting the most vulnerable • Level and quality of employment • Social acceptance
Focus World Bank
• Level of employment
Focus OSCE
• Decent Work • Social inclusion • Poverty eradication • Social dialogue and participation
Focus UNDP
• Social equality • Inter-country cost distribution • Justice • Inclusivity • Transparency

Tbl. 4. Summary Targets EU, WB, OSCE, UNDP

The **World Bank** seems to focus quite narrowly on the level of employment, especially in the coal sector (The World Bank, n.d.).

The **OSCE** mostly mirrors the approach of the ILO, focusing on decent work, social inclusion, and poverty eradication. They also reaffirm the need for social dialogue and participation of the affected people, and the need for an active planning of the transition (Just Transition Center, 2017). The United Nation Development Program (**UNDP**) reflects the broader approach, highlighting the risk of climate policies to exacerbate social inequality and civil unrest, the distribution of job-losses between countries and regions, and proclaims that "issues of justice, inclusivity, and transparency must be at the heart of transformation" (UNDP, 2022). The targets are summarized in table 4.

The academic literature on the topic highlights a wide array of socio-economic aspects that are (or can be) affected by climate policies, from all the aspects mentioned above, to impacts on gender, health, equity, agriculture, transnational capital, and the protection of social rights (Akgüç et al., 2022; Blattner, 2020; Ludden et al., 2021; Weitzel et al., 2023). There does seem to be an increasing focus on not just the general average of the impacts, but on the distribution of the impacts and on concerns of equality and justice, which often go beyond the equality concerns stated in the above discussed documents published by the international organizations (Denton et al., 2022; Wang & Lo, 2021).

In summary, the understanding of Just Transition and the understanding of the socio-economic aspects targeted vary greatly between the different organizations and declarations, from a very narrow understandings, which includes only the level and quality of employment to a very broad understanding which includes all SDGs. The question of employment is mentioned in nearly all. Apart from the narrowest definitions, most also include some sort of reference to poverty directly, or to variations thereof such the support of the "most vulnerable". Another consistent theme is some form of "social participation", "social acceptance", or other goals referring to a certain legitimization of the process and outcome of Just Transition policies.

4.2 EU Obligations towards External Just Transition

The EU's understanding of *internal* Just Transition is centered around the phrase of "leaving no one behind", and is supported by a host of different policies, mechanisms, and declarations. The approach to *external* Just Transition is necessarily more limited. "Leaving no one behind" in the whole world is neither feasible, nor is this really the political mandate of the EU. But the EU does position itself both as an increasingly relevant global player, and as an entity bound to and guided by its values (von der Leyen, 2019). While being a prominent theme in its various statements and declarations, it is somewhat debatable how far the EU takes its commitment to support the wellbeing of people outside its borders.

This subchapter deduces the external aims of the EU in the field of Just Transition as presented from their legal basis. There is not one specific official strategy towards external Just Transition (yet). But as a supranational organization and a legal person, the EU's aims and intentions in the filed just established to fall under the scope of Just Transition are codified in and based on its legal framework.

The competence and actions of the EU are determined by a rather complex legal framework consisting of the primary law, secondary law, and international law. The primary law are the two treaties, the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU). Secondary law are the regulations, directives, decisions, recommendations, and opinions adopted based on the primary law. Communications are not legally binding but are an official declaration of the EU's intents.

EU law naturally focuses on the EU's obligations towards its own citizens. But the increasing politicization of the EU and the EU's increasing confidence as an actor in the global arena have brought increasing attention to the EU's obligations towards third countries (Bartels, 2014; Berkes, 2018; Savaresi & Setzer, 2021). This change in perspective can also be seen in corresponding developments in the legal texts (Cremona, 2008; Savaresi & Setzer, 2021). After briefly establishing the EU's competence in this area, this subchapter analyses the declared aims and potential obligations[4] derived from EU Law, IL, and additional commitments.

The competencies of the EU to implement policies targeting the Just Transition in third countries are limited from two fronts. Externally by the sovereignty of the respective third country and internally by the principle of conferral within the EU. The principle of sovereignty is a foundation of the international world order.

A direct intervention of one country (or of a political unit like the EU) into the policymaking of another country or binding agreements between them must therefore be authorized by the affected government according to the principles of international law. This of course does not mean that a state (or political unit) cannot implement any policy that could affect any other state in any way, but it provides certain limits. The EU would not be allowed to force Moldova to close all its polluting industries, for example, but the EU would be perfectly within its rights to, for example, stop importing certain emission-heavy products, even if this would lead to heavy economic consequences in Moldova. But this external limitation is hardly visible in the discussion surrounding EU external policy since the actions of the EU seem to be generally accepted as in accordance with international law.

The internal limitation is a bit more complex. The EU is not a state, it does not have full sovereignty of all public actions taken by governing authorities within its territory. Instead, its legitimacy and its jurisdiction are derived from the legitimacy and jurisdiction of the Member States, all competencies of the EU to act (internally towards its members as well as externally towards third countries) are explicitly conferred to it by the Member States. Article 5 TEU states:

> *"1. The limits of Union competences are governed by the principle of conferral. The use of Union competences is governed by the principles of subsidiarity and proportionality.*
>
> *2. Under the principle of conferral, the Union shall act only within the limits of the competences conferred upon it by the Member States in the Treaties to attain the objectives set out therein. Competences not conferred upon the Union in the Treaties remain with the Member States."*

The EU can therefore only enact policies impacting Just Transition abroad if these policies fall within the competencies of the EU. The competencies of the EU are codified in Article 2-6 TFEU. They give the EU the competence to "define and implement a common foreign and security policy", shared competencies in the area of development cooperation and humanitarian aid, and the exclusive competence to conclude international agreements in accordance with EU law (Article 2(4); 4(4); and 3(2) TFEU). To enable the EU to be an international partner for these agreements, Article 47 TEU gives the EU the status of legal personality, making it a subject of international law. Title V, chapter I of the TEU further details the "General Provisions on the Unions External Action".

4 The differentiation between aims and obligations is somewhat hazy, especially in the field of international law (compared to EU or national law), since the provisions are by nature binding, but mostly phrased in a rather soft way, and are usually not per se enforceable. In a way, they could be understood as an "obligation to aim" for a certain outcome, with a very limited possibility of legal recourse if the aims are not achieved. For an easier read, the text will mostly use the term "obligation", since the phrasing of a paragraph usually already implies how strong the provision is.

External policies therefore do in general fall within the competencies of the EU and the EU is thereby able to pursue external policies targeting different aspects of Just Transition abroad. Additionally, the EU has exclusive competencies over most aspects of the internal market (Article 3 TFEU), which can have a significant external effect on third countries and their social and economic development.

4.2.1 Obligations from EU Law

Having established that the EU could act in this area, the next sections explores whether they should, whether this competence also leads to obligations in the realm of external Just Transition.

The treaties and other legal text provide detailed explorations on the obligations of the EU towards its Member States and its citizens, including comprehensive considerations on different aspects of the social and economic life of its citizens. Within the in chapter 4.1 established core of Just Transition – decent employment, poverty eradication, and social inclusion – a major part of the responsibility towards the citizens falls on the member states themselves, and only to a lesser extend to the EU. But as presented above, the relations to the third countries falls mostly on the EU[5]. And while it must certainly act within the bounds of international law, its obligations towards the outside world within the sphere of Just Transition are not quite established yet.

Treaties

The central legal texts are the treaties, the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU). The central principle of the EU's obligation to the rest of the world is codified in Article 3(5) TEU:

> *"In its relations with the wider world, the Union shall uphold and promote its values (...). It shall contribute to peace, security, the sustainable development of the Earth, solidarity and mutual respect among peoples, free and fair trade, eradication of poverty and the protection of human rights, in particular the rights of the child, as well as to the strict observance and the development of international law, including respect for the principles of the United Nations Charter." – Article 5 TEU*

This paragraph contains multiple aspects included in the scope of Just Transition. The listed norms should guide the EU's action in general, therefore also in the design and implementation of its external policies as well its internal policies with external effects. For the content of the desired outcome, it refers to a broad array of norms, notably "sustainable development", "eradication of poverty", and "protection of human rights" (Treaty on European Union, 2012). Both the term "human rights" (HR) as well as "international law" are umbrella terms which refer to a host of different more specific aspects listed in different legal sources, discussed in more detail below. But first I want to further analyze the first part of the article. The first sentence of the paragraph relates to the "values and interests" of the EU, which should be "promoted" (a term somewhat stronger than the "protection" and "observation" which is demanded via HR). These values and interests are listed in greater detail in Article 21(2) TEU and Article 21(3) TEU. Article 205 TFEU also reiterates the importance of Article 21 TEU as the guiding principle of the EU's external action. Within the sphere of the established core targets of Just Transition, Article 21(2) TEU states that:

> *"The Union shall define and pursue common policies and actions, and shall work for a high*

5 MSs can still have bilateral relations with third countries, but those will be excluded from the further analysis.

degree of cooperation in all fields of international relations, in order to:

a) safeguard its values, fundamental interests, security, independence and integrity;

b) consolidate and support democracy, the rule of law, human rights and the principles of international law;

c) (...)

d) foster the sustainable economic, social and environmental development of developing countries, with the primary aim of eradicating poverty;

e) (...)

f) help develop international measures to preserve (...) the environment (...), in order to ensure sustainable development". – Article 21(2) TEU

Article 21(2) TEU refers to the *aims* of cooperation with other states, the central explicit goals which the EU should pursue in its external policies. Mirroring the focus in Article 5, it refers to a broad array of values. The point most central to the EU's obligations towards External Just Transition seems to be point (d), "fostering sustainable economic, social, and environmental development". Notably, this is the one point which is explicitly limited to policies affecting developing countries. The other points do not mention a limitation to their territorial scope. The term "developing country" is somewhat contested and there is not one clear agreement on which countries fall into this category. But Moldova can be considered a developing country based on some of the assessments[6]. The targets are summarized in table 5.

Explicit targets for external policies
• Sustainable Development • Eradication of Poverty • Protection of HR • Democracy, Rule of Law • Sustainable Economic Development • Sustainable Social Development

Tbl. 5. Summary explicit targets

While this article gives the first insights into the outcomes the EU might strive for in its policies, it is still to determine which *forms* of policies are bound by them. Article 21(2) TEU only refers to *external* policies, "cooperation in all fields of international relations", as the area in which those goals should be pursued. But the following Article 21(3) further states that:

"The Union shall respect the principles and pursue [these] objectives (...) in the development and implementation of the different areas of the Union's external (...), and of the external aspects of its other policies. The Union shall ensure consistency between the different areas of its external action and between these and its other policies." – Article 21(3) TEU

This means that the objectives set out in Article 21(2) – summarized in table 5 – are to be strived for in external policies as well as in internal policies with external effects.

Additional obligations could come from general provisions which do not target external policies explicitly but implicitly, by targeting *all* policies. A central source of these implicit obligations is title II of the first part of the TFEU. Title II states the provisions with general application, the so-called "horizontal clauses", which provide a guideline for all EU actions (Perulli, 2014). Regarding the established scope of Just Transition, especially noteworthy are Article 9, on social considerations, Article 11, on environmental consideration, and Article 7,

6 The IMF classified Moldova as "Emerging and Developing Europe" in 2022 (IMF, 2022); The UN classifies Moldova in its "World Economic Situation and Prospects 2023" report simultaneously as an "Economy in transition", an "Upper-middle-income" country, and as a "Landlocked developing country" (United Nations, Department of Economic and Social Affairs, 2023) p.117-121

stating that the EU should take all their objectives into account in *all* their policies (Treaty on the Functioning of the European Union, 2012)

> *"In (…) its policies and activities, the Union shall take into account (…) the promotion of a high level of employment, the guarantee of adequate social protection, the fight against social exclusion, and a high level of education, training and protection of human health." – Article 9 TFEU*

> *"Environmental protection requirements must be integrated into the definition and implementation of the Union's policies (…) with a view to promoting sustainable development." – Article 11 TFEU*

> *"The Union shall ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers." – Article 7 TFEU*

The content of these objectives again complements the objectives discussed above. Similar to Article 21(2)(f) TEU, Article 11 TFEU mentions both environmental protection and the objective to promote "sustainable development". Article 9 TFEU on the other hand offers a more specific description of "social objectives". It mentions six aspects: the level of employment, social protection, social exclusion, the level of education, the level of training, and the protection of human rights , listed in table 6. The wording indicates these six aspects to constitute an exhaustive list of the aspects protected by this specific clause. Between the horizontal clauses, while all are equally applicable to all EU policies, there is an interesting difference in wording. Most articles, including Article 9 use wordings such as "shall take into account", or "shall aim to", but Article 11, on environmental protection, uses the somewhat stronger "must be integrated".

Implicit targets for external policies
• Level of Employment • Social Protection • Social Inclusion • Level of Education and Training • Protection of HR

Tbl. 6. Summary of implicit targets

Turning from the content of the norms to the addressees, it must again be established whether these objectives are applicable to external policies.

The horizontal clauses are not explicitly aimed at external policies, nor at internal polices with external effect, but they do not explicitly exclude them either. In its opinion on "new horizontal social clause in Article 9 TFEU", the European Economic and Social Committee elaborates nearly exclusively about the internal implications and obligations deriving from this article, but they do repeatedly stress that it should apply "across all relevant Union policies and activities" (para. 1.2, similar in para.3.2) and they do mention the external aspect once, stating that it must "apply it in the broadest sense across all EU policies, especially economic and foreign policy" (2012/C 24/06, 2012 para. 3.5). They are therefore implicit targets for EU external policy, summarized in table 6.

The development of secondary legislation in this area as well as communications from the Commission also indicate that social rights are increasingly perceived as a fundamental EU value in itself, rather than a means to an ultimate economic end (Perulli, 2014, p. 34). This development can also be observed in the trade agreements concluded by the EU, which increasingly contain "social clauses" which refer to social norms such as labor standards, adherence to Rule of Law, and the promotion of sustainable development (Gammage, 2018). The respective clauses within the agreements between the EU and Moldova are analyzed further below.

Charter of Fundamental Rights of the European Union

Another source of obligations to external Just Transition could be the Charter of Fundamental Rights of the EU (CFR). It delineates the core Human Rights, and as established above, the EU should include Human Right considerations in all its policies. Article 6(1) TEU establishes that the CFR has the same legal value as the treaties, and some of the rights codified fall into the sphere Just Transition.

Fundamental Rights
• Fair and just working conditions • Social security and assistance • Health Care • Access to services • Environment

Tbl. 7. Summary CFR Rights

Chapter IV details the provisions falling under the term "solidarity". Regarding the rights in the area of Just Transition, the chapter mentions: fair and just working conditions (Article 31 CFR), social security and social assistance (Article 34 CFR), health care (Article 35 CFR), access to services of general economic interest (Article 36 CFR), and environmental protection (Article 37 CFR), listed in table 7.

These provisions are more specific than the ones detailed in the treaties, but it is contested whether they can have an extraterritorial effect, and if, then how far this effect reaches. Article 51(1) CFR does state that the provisions within the Charter are "addressed to the institutions, bodies, offices and agencies of the Union". Additionally, the CFR does not contain a limitation on the territorial scope of its provisions, it only limits the scope ratione materiae limiting the applicability to policies implemented under EU law (Moreno-Lax & Costello, 2014).

There is some case law on the subject, which partly indicate that the CFR could have extraterritorial effect in cases where a policy is "governed by EU law and carried out under the effective control of the EU and/or its Member States but outside their territory", but overall, the case law does not seem to coherently indicate that individuals outside the EU could derive protection from the CFR against actions of the EU with extraterritorial effect (Berkes, 2018). The nature of the usual form of EU external policies, combined with the sovereignty of the respective third countries affected by those policies, means that the social effects as described in the charter can be expected to arise mostly from national policies and can therefore likely not be directly causally linked to the actions of the EU to such an extent that the EU or its institutions could be held accountable for their potential negative effects. If a sufficiently close link of EU policies to external developments protected by the CFR were to be established, it would most likely be an external policy explicitly targeting this area of the third country, and not an internal policy with external effects (Bartels, 2014).

European Pillar of Social Rights

Additional obligations to external socio-economic developments could also arise from the European Pillar of Social Rights (EPSR), a 2017 declaration of the European Parliament, the Council, and the Commission (European Commission, 2021b). It is supposed to guide the EU's actions in order to substantiate the call of Article 3(3) TEU for the EU to "work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment" and to "promote economic, social and territorial cohesion, and solidarity among Member States." The EPSR is comparatively new, and it provides a comprehensive insight into what exactly the EU understands as "social rights". It consists of 20 principles, divided into three chapters, "Equal opportunities and access to the labour market", "fair working conditions", and "social protection and inclusion" (European Union, 2017). The EPSR could help to substantiate external EU obligations, should they refer to "social rights" without further detailing. But they do not themselves confer external obligations. Paragraph 15 of the Preamble explicitly states that:

> *"The principles enshrined in the European Pillar of Social Rights concern Union citizens and third-country nationals with legal residence."*

In summary, the legal texts of the EU do contain obligations for the EU towards certain external socio-economic developments, but they are not straightforward. There are two possible lines of argumentation. On one hand, there are obligations that explicitly target external policies and internal policies with external effect. These are indisputably applicable, but their contents are rather vague. The central provision here is article 21(2) TEU. It states the aim to foster a "sustainable economic, social and environmental development" and the aim to eradicate poverty. The other line of argumentation is through the application of general provision to external policies. These general provisions provide more detailed descriptions of the target, but their applicability is more precarious. Another source of possible obligations is international law.

4.2.2 Obligations from International Law

The EU is a supranational organization based on, founded by, and thereby subject to international law (IL). Additionally, Article 3(5) TEU reaffirms that "in its relations with the wider world, the Union shall uphold and promote (…) the strict observance and the development of [IL]", reiterated in Article 21(1) and 21(2) TEU. IL could contain obligations towards external Just Transition mainly through the classification of Social Rights as Human Rights.

As detailed above, Human Rights are one of the central values and objectives of the EU. They are "universal, indivisible, interdependent, and interrelated" and therefore granting rights on all individuals, irrespective their nationality (World Conference on Human Rights, 1993). The center of the international HR regime are the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights (ICESCR) (United Nations, n.d.).

<u>International Covenant on Economic, Social and Cultural Rights</u>

The ICESCR is commonly understood as the most authoritative international codification of economic and social rights (Egan et al., 2018) and all EU MS are State Parties to it. Among others, the ICESCR grants the right to work, including an obligation of the State Parties to provide guidance and training programs (Article 6 ICESCR); the right to just and favorable working conditions (Article 7 ICESCR); the right to social security (Article 9 ICESCR); the right to an adequate standard of living, including food, clothing, and housing (Article 11 ICESCR); the right to the highest attainable standard of physical and

Social Rights
• Work • Training • Decent working conditions • Social Security • Decent standard of Living • Health • Education

Tbl. 8. Summary ICESCR Rights

mental health (Article 12 ICESCR); and the right to education (Article 13 ICESCR), listed in table 8.

The ICESCR provides a comprehensive overview of the content of the Economic and Social Rights protected. The obligation of states to realize them outside their own territory is more complicated but some extraterritorial obligations can be derived from them.

The ICESCR does not contain a territorial limitation within its text, nor does it generally limit the ratione personae of the obligations to the citizens of the respective state. It does highlight a specific exception:

> *"Developing countries, with due regard to human rights and their national economy, may determine to what extent they would guarantee the economic rights recognized in the present Covenant to non-nationals." – Article 2(3) ICESCR*

This implies that in all other cases, the rights must be guaranteed to both nationals and non-nationals. But still, the phrasing of the text, the assumed possibility of the States to realize the rights through policies (which they can generally only do in their own jurisdiction), as well as the general context of these kind of international treaties implies that the obligations generally apply to the territories of the State Parties.

European Social Charter

For European countries, additional obligations could arise from the European Social Charter (ESC). The ESC is a treaty under the Council of Europe (CoE) which all EU MS have ratified, albeit to various extends, making some MS bound to all provisions of the ESC and some MS bound only to part (Council of Europe, n.d.). The rights grant by the ESC correspond to a great degree to the rights granted by the CFR and the treaties (Council of Europe, n.d.). This makes the provisions of the ESC hard to generalize on the EU as a whole, and they promise at best a very limited addition to the rights already discussed. It will therefore not be further analyzed here.

The extraterritorial obligations in the area of Economic and Social Rights are currently not fully determined within IL. This gap in HR protection has been addressed in 2011 by a group of international experts in the field, trough the "Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights" (MPEO). These principles do not constitute a separate element of international HR law, but rather an international expert opinion on the appropriate interpretation of the existing law, primarily of the ICESCR (Abraham et al., 2011, p. 3). It states rather unambiguously:

> *"All States have obligations to respect, protect and fulfil human rights, including civil, cultural, economic, political and social rights, both within their territories and extraterritorially" – Article 3 MPEO*

On the nature of those obligations, Article 8(a) MPEO specifies that they encompass:

> *"obligations relating to the acts and omissions of a State, within or beyond its territory, that have effects on the enjoyment of human rights outside of that State's territory;"*

This mirrors the distinction made in the previous section, including both external policies and internal policies with external consequences.

Article 9 MPEO further clarifies the scope of the jurisdiction, stating that obligations arise in situations where the state exercises authority or effective control, in situations where the State's action has a "foreseeable effect" on the respective rights, and in situations where the State "is in a position to exercise decisive influence or to take measures to realize economic, social and cultural rights extraterritorially". The case of EU policies affecting Moldova seem to mostly fall into the second and third category. Internal policies with external effect can constitute as a state act with a foreseeable effect on Moldova and external policies, especially requirements of internal restructuring as will be elaborated in chapter seven, can constitute as the EU being in a position to exercise decisive influence. Article 17 MPEO also explicitly states that international agreements must be consistent with the listed obligations, as well as the international aspects of international trade, investment, finance, taxation, environmental protection, development cooperation, and security.

The MPEO, like most texts of IL, address "States", making its applicability to the supranational EU not immediately apparent. Article 16 MPEO clarifies that the principles "apply to States without excluding their applicability to the human rights obligations of international organisations". Notably, it does not directly state that it does apply to international organizations, only that it does not exclude the possibility of applying to international organizations.

The EU is derived from the statehood of its MS and some of the sovereignty of the MS has been conferred on the EU, including the associated rights and duties. In the areas where the EU has exclusive competences, such as foreign policy and international agreements, it even acts in place of the MS. In those cases, the obligations codified would become void, if they would not be transferred to the EU as well. It seems therefore reasonable to apply the provisions of the MPEO on the EU's external Just Transition policies.

The obligations codified in the MPEO are differentiated into the obligations to respect, the obligations to protect, and the obligations to fulfill; depending on the state's level of responsibility.

The "obligation to respect" is the broadest category and refers mostly to the negative duty of not actively causing harm.

> *"All States have the obligation to refrain from conduct which nullifies or impairs the enjoyment and exercise of economic, social and cultural rights of persons outside their territories." - Article 20 MPEO*

They must also not impair another State complying to their obligations, or "aid, assist, direct, control, or coerce" another State to breach their obligations (Article 21 MPEO). The circumstances in which rights must be protected are a bit more narrowly defined. Notably, states must ensure that non-state actors under their jurisdiction do not restrict the granted rights (Article 24 MPEO). They must also protect the rights if "the harm or the threat of harm originates or occurs on its territory" (Article 25(a) MPEO) as well as in the somewhat vague situation "where there is a reasonable link between the State concerned and the conduct it seeks to regulate" (Article 25(d) MPEO). The obligations to fulfill contain one article of special interest in the case of EU external Just Transition:

> *"States must take deliberate, concrete and targeted steps, separately, and jointly through international cooperation, to create an international enabling environment conducive to the universal fulfilment of economic, social and cultural rights, including in matters relating to bilateral and multilateral trade, investment, taxation, finance, environmental protection, and development cooperation. [This] is to be achieved through, inter alia:*
>
> *a) (...) multilateral and bilateral agreements as well as international standards;*

b) measures and policies by each State in respect of its foreign relations, including actions within international organisations, and its domestic measures and policies that can contribute to the fulfilment of economic, social and cultural rights extraterritorially." – Article 29 MPEO

The external Just Transition regime between the EU and Moldova, as presented in chapter seven, contains most of the policies listed in these articles. Additionally, the provision explicitly mentions the applicability of this provision on international organizations, thereby on the EU.

In summary, IL does contain provisions applicable to the EU's external socio-economic impact and it provides further elaboration on the concept of social rights. But the material content of these rights does not seem to encompass all that much more compared to the rights derived from EU law, and the applicability to EU external policy is arguably more contentious. While the enforceability is questionable, both present a rather clear and coherent vision of the type and direction of development that states should promote abroad, including the three Just Transition goals of climate protection, economic growth, and social considerations. The third potential source of obligations to external Just Transition are EU commitments or statements on the matter which go beyond the obligations discussed so far.

4.2.3 Obligations from Commitments

The EU's primary law and international law denote primarily broad goals. The commitments declared in secondary legislation and official statements give insights into whether and how those goals are actually pursued in more specific contexts. They also provide a more detailed understanding of which aspects within the sphere of Just Transition the EU finds most prominent in its external effect.

In the context of EU climate policy, the central communication is the European Green Deal (EGD). In the context of social rights as HR and their external pursuit, the central text for the years ahead is the EU Action Plan on Human Rights and Democracy 2020-2024 (EU Action Plan).

European Green Deal

The EGD provides little relevant information. While Just Transition is a very prominent aspect throughout the document, it is mostly targeted explicitly at internal developments. Regarding the EGD's aspirations for external effects, it mostly aims to further climate mitigation policies, without detailing their potential repercussions (COM, 2019). The aim of external Just Transition is implied only twice. Mirroring the statements discussed above, the chapter on "the EU as a global leader" states:

"The EU also recognises that the global climate and environmental challenges are a significant threat multiplier and a source of instability. (…). The EU will work with all partners to increase climate and environmental resilience to prevent these challenges from becoming sources of conflict, food insecurity, population displacement and forced migration, and support a just transition globally." (COM/2019/640, 2019, p. 21)

External Just Transition seems to be a factor, but the focus is on incorporating climate considerations into external policies, not socio-economic considerations into climate policies. The second mention is in the chapter on "mainstreaming sustainability in all EU policies", stating:

"All EU actions and policies should pull together to help the EU achieve a successful and just transition towards a sustainable future" (COM/2019/640, 2019, p. 19)

As above, "all action" does include external actions, and there is no explicit territorial specification on where this Just Transition should take place.

The term "sustainable development" is mentioned more often, but without specifying explicit goals.

EU Action Plan

The EU Action Plan is a bit more specific. The introduction highlights the focus of this action plan (versus the previous) on "strengthening the link between human rights and the environment [and] increased action on economic, social and cultural rights" (European Union, 2020, p. 5). It lists the intended actions to protect "Economic, Social, Cultural and Labour Rights" to be:

> *a. "Strengthen the **linkage between human rights and the environment,** including climate change in EU external action. (…)*
>
> *c. Promote a zero-tolerance policy on **child labour,** and the eradication of **forced labour**. (…)*
>
> *d. Support the role of public authorities in adopting and ensuring compliance with environmental regulations aimed at securing a **safe, clean, healthy and sustainable environment,** (…)*
>
> *e. Assist state authorities in developing and implementing laws, regulations, policies and programmes on **water, food, land, natural resources, housing and property** that uphold human rights.*
>
> *g. Curb inequalities by **combating poverty and social exclusion**, and by promoting nondiscriminatory **access to social services**, including quality and affordable health services and inclusive and equitable quality education, including distance learning. (…)*
>
> *h. Foster **health promotion** and equal access to preventive health services and the right of everyone to the enjoyment of the highest attainable standard of health, (…)*
>
> *i. Promote decent work and a human-centred future of work (…) ensuring the respect of **fundamental principles and rights at work** (…)" (European Union, 2020, p. 15,16; emphases added)*

As usual for these kinds of texts, the carrying verbs are rather soft ("support", "promote", etc.). The strictest language surrounds the protection against child- and forced labor. The other paragraphs include aspects to a healthy ecological environment (d., e.), health (h.), labor rights (i.), and social cohesion (g.). Notably, paragraph g lists a few aspects that have not yet been a focus in the other EU texts. Social exclusion, social cohesion, and access to services are mentioned in the international declarations discussed above, but are not explicitly included in either the ICESCR, the MPEO, nor the EGD. They include provisions on enabling and enhancing economic developments, the occasional mention of the need to protect especially vulnerable groups, and seemingly focus especially on the poorest, or the most vulnerable groups, but not on the social cohesion of the whole society- Interestingly, despite its focus on "economic developments", neither the ICESCR nor the main text of the MPEO mention "poverty" once. The EGD mentions it a few times, but mostly in the context of "energy poverty". The ESC does mention both the fight against poverty and social exclusion in Article 30.

In summary, the legal texts from EU law, IL, and additional commitments provide a wide array of obligations regarding external Just Transition. They include explicit obligations to include in the external policies a general respect for the basic social rights of citizens abroad and to include considerations on sustainable economic and social development in their external policies, and to aim toward an eradication of poverty and towards a strengthening of democracy.

Additionally, the texts provide implicit obligations for the EU to include in its external policies considerations towards a high level of employment and education, social protection, social inclusion, and towards protection of human rights. A special focus is on the protection and support of the most vulnerable groups, but some provisions concern the general population as well. And while the quality of employment is mentioned throughout as a goal, within the more binding provisions, the focus seems to be more on the level of employment. The priorities thereby mostly coincide with the perspective of the ILO core targets and additionally, the EU perspective heavily emphasizes the aim of supporting democracy and the Rule of Law.

The analysis in the later chapters therefore assumes the core targets of the EU in its external Just Transition to be 1) supporting a high level of employment 2) decreasing poverty, 3) supporting social cohesion with a special focus on the most vulnerable groups, and 4) strengthening the rule of law, listed in table 9. These targets are not binding obligations, but general aims.

Core Just Transition Targets of EU External Policies
• Employment level • Decreasing poverty • Social cohesion • Strengthening Rule of Law

Tbl. 9. Core EU Targets

4.3 The central indicator

These targets, increased employment, decreased poverty, increased social cohesion and strengthened Rule of Law denote the *aims* of the policies, they denote the developments that the states and organizations should aspire to produce. This designation of Just Transition *goals* allows for a designation of Just Transition *policies* in chapter seven. The specific analysis of the success of those policies calls for a single indicator, operationalizing the first three targets. Rule of Law remains a separate indicator because it does not refer to an economically measurable development but the setup of the government. An especially appropriate indicator is wealth distribution.

An equal distribution of costs, or other provisions on monetary equality are not central themes in the analyzed documents. Especially the communications of the EU appear to shy away from using politically sensitive words such as "redistribution". It seems politically sensible to highlight the positive effects of your policy or ambition on the poorest parts of society, and implicitly hiding the therefrom resulting implications for the richer parts of society. But wealth inequality is still mentioned in some EU commitments, and it is arguably "in the spirit" of the texts, meaning that even if monetary equality is not explicitly mentioned it is not going against any of the explicitly stated goals.

I argue that if we look at the mechanics and motivations behind the targets, wealth distribution is most closely at the heart of the first three.

Employment

The issue of jobs lost due to the climate policies is one of the most consistently mentioned aspects. The most valid indicator for this is the level of unemployment. But the reason why the potential loss of a job is such a problem is the loss of income. Even if including the ILO focus on decent employment, both economically and socially, the most central aspect of the quality of employment is arguably the height of the income. Additionally, the change in wage is an aspect that can more easily be measured and compared, other than, for example, the level of safety or the level of enjoyment of the occupation. Being employed (versus being unemployed but still rich), might very well be beneficial for the mental wellbeing and the feeling of connection to society of the person in question, but they are neither at the center of attention of the documents and literature discussing the issue, nor do they intuitively seem to be at the heart of the problem.

The level of income also strongly influences the level of wealth. It is not identical, a person with a high income could still be poor, if their expenses are very high, and a person with a low income could still be rich, if they have a high enough pre-existing fortune. Therefore, the income equality would be a better indicator for the target of employment than the wealth inequality. Nevertheless, the paper will use wealth distribution as the central indicator, because it approximates the implicit problem at the heart of the target "employment" well enough, and wealth distribution is a better indicator than income equality for the other targets discussed below.

Poverty

In theory, wealth distribution could be a misleading indicator for the poverty in an economy. A society could be extremely unequal, but even the poorest have a very decent standard of living. Reversely, a society could be perfectly equal, but with every single person living in absolute poverty. But practically, both climate policies as well as mitigation policies tend to disproportionally target the poorest parts of society. Climate policies unintentionally, as discussed in detail in the next chapter, and mitigation policies intentionally, in order to compensate for just this disproportionate burden. Just Transition approaches such as the EU's "leaving no one behind" target the material wellbeing of the poorest households or try to alleviate some of the extra burden from certain climate policies. Combined with the general trend within the EU of ever-increasing wealth disparities, the risk seems sufficiently low that a decreasing wealth distribution would actually be caused by a decrease in wealth of both poorest and richest, but with a stronger decrease of the richest.

Still, if the policies target the absolute improvement of the poorest parts of society, then the most intuitive indicator for this target would be the level of relative or absolute poverty, or the absolute change of wealth of the poorest 10%. But I would argue that the focus on the *distribution* of wealth within the economy does not only include this aspect, it is also a more suitable and informative measure. For four reasons: Normatively, economically, ecologically, and politically.

Firstly, whether a climate policy leads to a more or less equal society can be relevant from a normative standpoint. The wealthiest households are generally the greatest contributors to climate change, and the perceived fairness of a measure is central to its acceptability (Ludden et al., 2021).

Second, to understand the consequences of a certain policy it is often essential to understand whether they lead to absolute or relative changes in income, energy use, or other indicators. For the affected person or community, it is likely more important whether their situation changed absolutely, but for the macroeconomic analysis it can be essential to include the development of the whole economy as well. For example, a notable increase in wealth of the poorest people would need to be relative to the rest of society, and not just absolutely, since of course a uniform increasing in income across all citizens would just lead to a corresponding increase in prices. For the analysis of the effect of a specific climate policy on poverty reduction, it is not so much the change in average income that is interesting, but the change in income of a specific group.

These developments could still be operationalized through a focus on the poorer parts of society and could exclude the developments in the richer parts of society. But, thirdly, the ecologic implications of policies usually depend on the overall, absolute output, development, etc., of a policy. If the poorest and/or most vulnerable should be shielded from certain consequences, that would necessarily mean additional "burdens" on those not in those categories. For example, if the whole economy needs to reduce their emissions by half, this could be achieved by a 50% reduction across all income levels. But if this would lead to abysmal consequences for the poorer half, and the poorer half would therefore only be required to reduce their emissions by 25%, then the richer half would necessarily need to cut back by 75%. A calculation by the IPCC shows that if every European is provided a realistic minimum energy use for a decent life - 55 gigajoule- , then the 1,5°C target can only be reached with near equality of energy use (Denton et al., 2022).

This leads lastly to the political implications. Whether or not the richest communities will (absolutely) lose, gain, or stay unaffected from a certain policy affects the likelihood that the policy will be adopted, and what kind of resistance the policy is expected to face. And since, due to the same mechanisms that make poorer people more vulnerable, rich people as a group are disproportionately more powerful and influential, their approval or disapproval of a policy measure is disproportionately more impactful on its chances to be implemented.

Social cohesion

Target like social cohesion or social exclusion are very broad terms and encompasses many dynamics which exceed the particular aspect of a more equal distribution of wealth. But it is arguably still the best measurable indicator.

Access to money is in our economic system the central pillar of systemic power and social dynamics. Documents and declaration addressing "social" issues often use language such as protecting "vulnerable groups", or "combating exclusion". This is often used as a euphemism for poor people. While social exclusion can have many forms, sexism, racism, ableism, etc., the nature of an intersectional social system is that these forms of exclusion mostly coincide with and lead to a lack of access to monetary wealth. Not only are poor people socially vulnerable, but systemically more vulnerable communities are also often poorer. Having more money would not necessarily fully counter the negative social effects of these other forms of exclusion, but they would allow the excluded groups a greater ability to advocate for themselves and participate in society. A more economically equal society would not necessarily translate to a more socially cohesive. But given the strong connection between the two, the lack of another intuitive indicator, in addition to the aim of this sub-chapter to establish one single most appropriate indicator, I argue that wealth distribution is a sufficiently appropriate indicator for social cohesion and integration.

Rule of Law

Other than the previous targets, Rule of Law cannot be adequately indicated by wealth distribution. There is likely some correlation there, with a corrupt, undemocratic or even autocratic system being a fertile ground for economically powerful individuals to gain even more wealth, i.e., making the societal wealth distribution even more unequal. But the connection is not as close as with the other targets. The impact of Just Transition policies on the Rule of Law is therefore assessed separately.

Rule of Law is a broad as well as contentious term, often grouped together with Democracy and Human Rights as the general markers of a well-functioning governance structure and as fundamental values of the EU (see Art.21(2) TEU). Rule of Law specifically denotes at minimum two characteristics: a) that the government acts according to, and is limited by predetermined legislation and b) that there is a judicial system in place which can hold the authorities accountable to those rules (Daniels & Trebilcock, 2004). It can also be understood broader to include the fight against corruption, respect of property rights, and respect for human rights (Mendelski, 2018). In its essence, it means that the actions, competencies, and policies which make up governance in the broad sense are based on rules. This means also in reverse that the laws and legislations which are (legitimately) ratified are also actually implemented. This governmental capacity is both an important goal in its own right as well as a prerequisite of all other policies to have the effect they intend to have.

For the analysis of the Just Transition effects of the EU policies on Moldova, this paper puts particular focus on this capacity-building aspect of Rule of Law.

Chapter Summary

This chapter analyses the first sub-question:

SQ1: What socio-economic aspects of Just Transition does the EU target with their external policy?

Within the constrains and assumptions presented above, it finds that:

The EU external policy especially targets the aspects of employment, poverty, social cohesion, and Rule of Law.

An indicator for the first three is the wealth distribution within the respective economy.

The descriptions and analyses in chapter six and seven also highlight other indicators if emphasized by the literature or by the understanding of "Just Transition" of the respective policy, but they specifically detail which economic groups the policy target, and whether they are expected to gain or lose wealth. To substantiate this analysis, the next chapter highlights the connections between climate policies and wealth distribution.

5. Impacts of Climate Policies on Wealth Distribution

This chapter delves deeper into the connections and contentions between climate policies and wealth distribution. This analysis provides the framework through which chapter seven assesses the impact of the EU policies on Moldova.

Chapter four has just shown the wide variety of goals targeted within the concept of Just Transition. In order to reach those goals, climate policies might be designed to be a little less effective in reaching its climate goals but lead to less negative socio-economic "side effects". Or they might be accompanied by additional mitigation policies. But why is that even necessary?

There is a wide variety of different climate policies with different effects on the wider economy and thereby on the wealth distribution. Additionally, the final effect is not only determined by the policy design as such, but also by the contextual factors within the economy. The same policy might lead to completely different results in two different countries. The focus of this chapter is therefore not on the final effect, but rather on the pathway of the effect. It presents a framework of analysis of potential wealth-distribution effects and the relevant contextual factors, answering the second sub-question:

SQ2: How can climate policies impact the distribution of wealth within an economy?

The first sub-chapter presents a theoretic framework, namely the differentiation into three pathways: a consumption channel, an income channel, and a revenue recycle channel. The second sub-chapter summarizes empirical analyses on the distributional effects of climate policies within specific policy sectors; namely general decarbonization policies, energy, building, mobility, and industry.

5.1 Theoretic Framework

The level of wealth of a household is mostly determined by the level of income, the level of spending, and potential previously owned assets. This chapter therefore adopts the terminology of Shang (2023) and conceptualizes the impact of (climate) policies on wealth distribution through a differentiation between the consumption channel, the income channel, and the revenue recycle channel[7]. Each sub-chapter highlights the central determinants of the policy's impact through the respective channel and highlights which national characteristics of the affected economy are most relevant for the policy's final effect.

5.1.1 Consumption Channel

The consumption channel denotes the change in wealth through the change in household expenses and is therefore mostly acting through changes in prices of goods and services. Climate policies can change the prices of consumer goods in various ways, they can affect the cost of production through the prices of input factors, the operating costs, or the cost of labor or capital. They could also affect the demand of the consumers, thereby indirectly changing the prices of the goods. How a change in any of the input factors would translate to the change in the final prices of the goods depends on the characteristics of the respective economy and companies. Part of the increase[8] of the price would be passed through to the consumers, through an increase in the final

7 In addition to the consumption, income, and revenue channel, Shang (2023) also lists the health channel as the fourth major influencing factor of climate policy on poverty and distribution. Due to the established scope of this thesis, the health channel will not be further included in the discussion.

8 The same holds true for a decrease in price/costs. To provide for an easier read, the text will generally assume an increase in price of the input factor and will detail how that will lead to increases or decreases of prices in other areas. A decrease

price for the good (Shang, 2023). But not necessarily all of it. The producers can also absorb some of the burden, by producing their goods at a higher cost without raising the product price (as much).

Fullerton and Muehlegger (2019) apply the theory of tax incidence to analyze how the burden of environmental regulation is shared between consumers and producers. They view pollution as an input factor to production, and the environmental regulation increases the price of this factor. Assuming the production technology to be constant and assuming perfect competition, the incidence of the regulation depends mainly on the relative demand and supply elasticity of the good[9] (Fullerton & Muehlegger, 2019). If the demand for the good is relatively more elastic, than the producer will bear a greater share of the burden. Because if the producer were to raise the price too much, the demand would drop to such an extent that the decrease in revenue from the decrease in output would be greater than the increase in revenue from the increase in price. Reversely, if the supply is more elastic[10], the consumers are more willing to pay more to attain the desired output quantity than the producer would be "hurt" by the respective decline in output. So, the producers can increase the output price more and still find enough consumers willing to pay this new price. This dynamic also holds true for the burden incidence along the production line, with the greatest burden falling on the most inelastic step of the production chain (Fullerton & Muehlegger, 2019).

From the perspective of the consumption channel, the central characteristics of a climate policy are therefore the *type* of goods the policy is affecting and the level of change in price it induces If climate policies increase the price of essential goods, in contrast to policies which effect luxury products, they will hit poorer households especially hard. Essential goods have, nearly by definition, a low demand elasticity, i.e., the consumers will continue to buy the product even if the price increases drastically. Both poor and rich households usually consume these essential products and are therefore affected by the increase in price. But for poor households, essential goods make out a greater share of their total expenses, an increase of prices in theses goods therefore leads for poorer households to a significantly greater increase in their costs relative to their total expenditure (Markkanen & Anger-Kraavi, 2019). Policies which increase the prices of goods which are over-proportionally consumed by poorer households can be expected to have a more regressive effect than policies which effect the price of goods consumed by more wealthy people. Research has further shown that an increase in prices for a very broader category of goods is generally regressive, since poorer people spend a bigger share of their income on the respective category of good, even if they spend absolutely less on them (Büchs et al., 2011). This

Central policy characteristics:
• Type of goods affected • Level of change in price
Central national characteristics:
• Consumption composition • Demand elasticity

Tbl. 10. Characteristics Consumption Channel

in prices would lead to inverse effects.

9 Elasticity in this context denotes the reaction to a change in price. A high demand elasticity means that the consumers react to a relatively small increase in price with a relatively large reduction in demand. Putting it colloquially, if something gets a little bit more expensive, a lot of people will not want to buy it anymore. Reversely, a low demand elasticity means that even if faced with a relatively large increase in price, consumers will only reduce their demand relatively little.

10 Supply elasticity works the same, a high supply elasticity means that the producers react to a relatively small increase of the price with a relatively large increase in supply. If they can get a little bit mor money for their good, they want to sell a lot more of it.

distributional effect, whichever direction, will be stronger the greater the change in price.
The corresponding central characteristics of the national economy are therefore the consumption composition of the poorest and richest households and their demand elasticities of the affected goods. “The poorest” households and “the richest” households can be operationalized by analyzing and contrasting the first and fifth quintile. This specific operationalization has the advantage of including the consumption of a significant number of households, 40%, while still focusing on the more extreme ends, thereby likely providing a meaningful difference in consumption expenditure. All characteristics are summarized in table 10.

The knowledge of both the characteristics of the policy and the characteristics of the economy offers policymakers an opportunity to intentionally influence and guide the distributional effect of a policy.

A policy could utilize the different consumption compositions and be designed to mostly affect goods predominantly consumed by the wealthy.
Or a policy can be accompanied by mitigation policies trying to increase the demand elasticities of the poorer households.
One main determinant for the elasticity of demand is the availability of alternatives. If a climate policy increases the cost for a certain ecologically harmful good, then the policymakers can proactively implement an accompanying policy which makes a more environmentally friendly alternative more widely available. For an easy example, if a carbon tax makes gas more expensive, then the government can invest in public transportation. If stricter regulations on livestock make meat more expensive, the government can subsidize plant-based proteins. This not only incentives the consumers to switch to the more climate-friendly alternative, more than just the price increase alone, or just the subsidy. The effect on the demand elasticity would also lead to a lesser increase of the price, which would make the good more affordable for those who cannot (easily) switch to the greener alternative. Following up on the examples above, the availability of public transportation or cheap plant-based proteins would not only allow more people to switch to those alternatives, it would also decrease the price of the gas for those people who still have no access to public transportation or the price of meat for those who need it for dietary reasons. This lower price (for the same output level) would then put a greater share of the burden unto the producers, which could then lead to more pressure for internal restructuring within the production, which leads us to the income channel.

Another factor impacting the overall demand elasticity is the level of trade. The level of trade has been found to have a significant potential to impacting the wealth distribution, but is not yet that well researched (Shang, 2023). If either end-consumers or intermediate producers can easily buy their consumer goods/production inputs from outside the regulated territory, the change in price could be significantly less, which would on one hand prevent a regressive distributional impact but would of course also undermine the ecological effectiveness of the measure.

5.1.2 Income Channel

The income channel denotes the change in wealth and wealth distribution through the increase or decrease in household income. Depending on the sources of household income, this increase/decrease can come from a change in the revenue from labor, i.e., the level of wages; from changes in the return from capital; and from changes in government for pensions and social services (Shang, 2023). Central to the policy's impact on the *distribution* of income is the group of people affected, and whether their initial income is above or below average and whether this initial income decreases or increases in reaction to the policy.

A way to generalize this impact is to first look at the sector affected by policy and determine the effect on the return for labor versus the return to investment. As every Economy 101 class states, a production function can be simplified into its relation of the two input factors capital and labor. Both capital and, to a significantly lesser extent, labor are mobile between different sectors and companies, and can therefore react to changes in incentives. The return to either – so wages for labor and rent for capital – depends on the production function. Since it can be assumed that people who (also) own capital are wealthier "from the start" than people who only "own" their labor, an analysis of how climate policy affects the return to labor relative to the return to capital can shed some light on the general distribution of wealth.

Building on the conceptualization in the previous sub-chapter, pollution within the production process can be viewed as one of the input factors, next to capital and labor (Fullerton & Heutel, 2007). A climate policy that aims to restrict pollution, such increased prices for energy, an ETS, or others, can be understood as an increase in the price of the input factor pollution.

To adapt to this new cost and to again maximize the utility of the production, the producer can now either decrease their output, or substitute the pollution by using relatively more labor or relatively more capital, or a combination of both (Fullerton & Heutel, 2007). The effect of the decrease in output on the returns of labor and capital is aptly called the output effect, the effect of the substitution within the production function on the returns of labor and capital is called the substitution effect.

For a simplified example, if a courier service uses cars to transport their goods, and a new climate policy makes gas more expensive, they could 1) make less deliveries, i.e., decrease their outputs. If they make less deliveries with the same production function, they will use less labor and less capital as well, with both decreasing according to the intensity of their use. If they use relatively more labor for their production (so more labor relative to capital), the decrease in output will lead to a decrease in demand for both labor and capital, but due to the higher labor intensity, there will be a greater absolute decrease in demand for labor. Then they would likely need to increase the prices to maximize their profit. Whether they can do that, and how much they can increase the price depends primarily on the demand elasticity, as described above.

Conversely, they could 2) substitute away from the now more costly gas. They could do that 2a) through increasing the deliveries by bike, i.e., substituting towards labor. Or they could 2b) invest in an electric car, i.e., substituting towards capital. So, both the Output Effect and the Substitution Effect can lead to either an increase in the relative demand for capital or an increase in the relative demand for labor. Scaled up to the whole economy, an increase in the demand for labor (relative to the increase in demand for capital) would lead to a greater increase in wage (relative to the increase of returns to capital). Under the aforementioned assumption, a relative increase in wage would lead to a more equal distribution of wealth.

As necessary for such a model, it relies on a set of simplifying assumptions such as perfect factor mobility, constant return to scale, no trade, etc. Under these assumptions, Fullerton and Heutel (2007) find that an increase in costs for pollution leads to an increase in wages relative to capital returns if:

1. The polluting production and the non-polluting alternative are equally as labor- and capital intensive (ergo no output effect), and labor is the better substitution for pollution in the polluting production process[11].
2. Pollution cannot be substituted by neither labor nor capital (ergo no substitution effect), and the polluting production process is more capital-intensive than the non-polluting production process.
3. If the polluting production and the non-polluting production have different labor-to-capital factor intensities and pollution can be substituted within the production process, then both the output effect and the substitution effect are at play and the final effect on the relative increase of wages depends on their relation. Under these conditions, wages rise if:
    a. The polluting production is more capital intensive, and labor is the better substitution within the production.
    b. The polluting production is more capital intensive, capital is the better substitution within the production, but the Output Effect is absolutely greater than the Substitution Effect.
    c. The polluting production is more labor intensive, labor is the better substitution within the production, but the Substitution Effect is absolutely greater than the Output Effect. (Fullerton & Heutel, 2007).

Throughout all these variations, no matter the substitutability and the factor intensities, the output quantity of the polluting production decreases and the price of the output increases.

Table 11 summarizes the effects of all the different combinations of production intensities and substitutability.

Intensity / Substitution	Polluting PP more **labor intensive** than non-polluting PP	Polluting PP **equally** intensive as non-polluting PP	Polluting PP more **capital intensive** than non-polluting PP
Labor is the better substitute for pollution in the PP	↑↓ More likely increase, but decrease possible	↑ Wages increase (caveat see text)	↑ Wages increase
No substitution of pollution possible	↓ Wages decrease	= No change	↑ Wages increase
Both are equally good substitutes	↑↓ Both possible, depending on consumer demand	= No change	↑↓ Both possible, depending on consumer demand
Capital is the better **substitute** for pollution in the PP	↓ Wages decrease	↓ Wages decrease (caveat see text)	↑↓ More likely decrease, but increase possible

Tbl. 11. Summary interplay output effect and substitution effect, by author, based on Fullerton and Heutel (2007)

11 This effect only holds if the complementarity between labor and capital is not too high. If the complementarity exceeds a certain threshold, the effect can be opposite.

Further numerical examinations of this model based on empirical data from a number of example cases indicated that the substitutability within the production can be expected to be generally more impactful than the factor intensity (Fullerton & Heutel, 2007). In the case of a more labor-intensive production, paired with labor being the better substitute (shown in the first cell), the wage-increasing effect of the substitutability is therefore expected to more likely outweigh the wage-decreasing effect of the output effect. Reversely, if the production is more capital-intensive (i.e., wage increasing), but capital is also the better substitution (i.e., wage decreasing), the wage decreasing effect is likely stronger. “PP” stands for “Production Process”.

The above listed circumstances describe extremes to allow for analytical modeling, but the actual preconditions to not have to fulfill them all the way to lead to a relatively greater increase of wages. The closer they are the stronger the expected effects, for example, an only nearly equal factor intensity between polluting production and non-polluting production would still approximate the effects described in above, so if accompanied by a stronger substitutability of labor, it can still be expected to lead to a greater increase in wages.

This framing of the distributional effects as a comparison between the increase of wages and the increase of capital returns provides an insight into general dynamics in the longer term, since the model assumes full labor mobility. In the short- to medium term, the effect on the wealth distribution also depends on the relation to the wages in the other sectors.

The increase or decrease of wages in the sector affected by the climate policy can be regressive or progressive, depending on weather the affected wages were originally below or above average. If the affected sector has a below-average wage, then an increase in wage would lead to a more progressive overall effect. If the affected sector has an above-average wage, then an increase in wage would lead to a more regressive overall effect. Another central aspect is the size of the affected sector. If a policy affects a sector employing a large number of people, then the overall effect of this policy will be respectively larger compared to a policy affecting a sector which employs only a marginal share of workers.

A climate policy can be assumed to be more progressive if it either – within one sector – increases the wages relative to the return to capital or if it – between sectors – increases the wages of workers in the sectors with lower income relative to other sectors.

From the perspective of the income channel, the central characteristics of a climate policy are therefore the sectors affected and within that sector, the specific aspects of the production process targeted (whether it increases the cost of general pollution, of GHG emissions, of energy use, …).

The corresponding central characteristics of the national economy are therefore – between the sectors – the wages and size of the affected sector relative to the other sectors, and – within the sector – the labor versus capital intensity and the pollution substitutability. The characteristics are summarized in table 12.

Central policy characteristics:
• Type of industry affected • Aspect of production targeted
Central national characteristics:
• Labor/capital intensity • Pollution substitutability • Relative wages

Tbl. 12. Characteristics Income Channel

These effects from the income channel can be quite substantial, there are indications that they have the potential to be strong enough to reverse the distributional effect of a climate policy which has, through the consumption channel, an initially regressive effect, making the net-effect progressive (Shang, 2023).

5.1.3 Revenue Recycling Channel

After the consumption channel and the income channel, the third channel through which climate policies can impact the wealth distribution is the revenue recycling channel.

The policymakers can try to counter the regressive effects of their climate policies by implementing all kinds of economic or social policies aimed at increasing the monetary equality within the society. Prominent examples of such policies are exemptions for especially vulnerable groups, structural assistance, comprehensive adaptive support schemes, and revenue recycling schemes (Ludden et al., 2021). This subchapter primarily looks at revenue recycling schemes since this thesis focuses on the distributional effect of climate policies as such and not on the absolute impact of the general policy mix within an economy. “Revenue recycling” is for this paper understood to mean that the revenue is intended to support Just Transition in the broad sense, but in general, the revenue could of course be recycled for any other goal as well.

Revenue Recycle Schemes
Direct transfer: Progressive
Lump sum transfer: Progressive
↘ Labor Tax: Progressive
↘ Property Tax: Regressive
↘ Capital Tax: Regressive
↘ Inheritance Tax: Regressive
Subsidies: Potentially progressive

Tbl. 13. Likely Effects of Revenue Recycle Schemes

Some climate policies generate revenue, most prominently carbon taxes, or similar emission pricing schemes such as the EU ETS. Revenue recycle schemes are, as the name suggests, any kind of policy which uses the revenue from those climate policies to fund other policies. Their effects on the wealth distribution are somewhat more straightforward than the other channels since they are by the just circumscribed definition directly intended to have poverty alleviating effects. The central schemes are direct transfer of money, lump sum transfer, tax cuts, and subsidies.

Direct transfer of money to certain household intuitively benefits those households. If they belong mostly to the poorer parts of society, then the effect of those transfers can be quite progressive. But there are certain administrative costs associated if the administrative structure must first be established, and there is a risk for both mismanagement, i.e., not effectively reaching the targeted households, and for abuse, i.e., benefitting households who are not intended as the recipients (Fragkos et al., 2021; Shang, 2023). These forms of monetary compensation could also decrease the ecologic effectiveness (Ludden et al., 2021).

Lump sum transfers[12] are also expected to have a progressive effect, but less than a (correctly implemented) targeted transfer (Fragkos et al., 2021). The administration is expected to be easier, and it could garner wider support, since all parts of society, including the influential elite, would benefit (Dinan & Rogers, 2002).

12 Lump sum transfers refer to the complete and uniform re-transfer of all the revenue to all the citizens, so every citizen would receive approximately an amount of money equal to the total revenue divided by the number of citizens. While all household get an absolutely equal amount, the amount would be relatively more to poorer households, since it constitutes a greater amount relative to their wealth.

Tax cuts can have various effects, they are unified in being potentially easier to administer, since it only needs an adaption of a pre-existing system (Fragkos et al., 2021). An decrease in labor tax can be expected to have an overall progressive effect, and has the potential to additionally increase the productivity of the economy (Fragkos et al., 2021; Ludden et al., 2021). A decrease in labor tax would also decrease the cost of labor within the production process, which could increase the demand for labor and counter the wage-depressing effects discussed above. Tax cuts to corporations or industries can have either progressive or regressive effects, depending on the design and their effects on the production process, but they could compensate corporations for their costs of adapting to the new regulations (Dinan & Rogers, 2002; Shang, 2023). A decrease in Property-, capital-, or inheritance taxes are expected to be regressive (Ludden et al., 2021).

Subsidies similarly depend heavily on the design. Within the general economy, subsidies can – reversely to a price on emission – internalize the societal benefit of greener alternatives, climate research, etc., and thereby correct a market failure and increase the aggregated societal utility. Subsidies directed at households or consumers has a clearer connection to wealth distribution, but not necessarily a homogenous one. Subsidies for public transportation are expected to be progressive (Ludden et al., 2021). Subsidies for improving household energy efficiency on the other hand have a strong potential to be regressive, since even with the subsidy, improvements in the energy efficiency can constitute an upfront cost not manageable for households below a certain wealth (Ludden et al., 2021). Generally, subsidies can both ease the absolute burden on consumers and can shift their behavior towards a more climate friendly alternative. This in turn can again impact the supply production and put further pressure on the industry to switch towards a more climate friendly production process. The likely effects of all these revenue recycle schemes are summarized in table 13.

A less direct way to combat regressive effects of climate policies is to spend the revenue on structural adjustment assistance. Structural adjustment assistance can include subsidies as well but denoted generally a broader monetary or nonmonetary assistance for households, groups, or even individuals with the aim of helping them to change their situation in such a way, that they are in the long term less affected by the change, such as reskilling programs or subsidies to switch to renewable energy (Ludden et al., 2021). They can have a markable effect on the wealth distribution following climate policies, but their complexities bear the risk of inadequate implementation, and non-take up. Additionally, they generally do not seem to be funded by climate policy revenues (Denton et al., 2022).

In summary, from the perspective of the revenue recycle channel, the central policy characteristic are the targeted beneficiaries and the amount allocated. The first refers to which groups of people are expected to benefit from the scheme, the more targeted the allocation to the poorest parts of the economy, the more progressive the final effect, and the greater the amount, the stronger this effect.

Central policy characteristics:
• Targeted beneficiaries • Amount allocated
Central national characteristics:
• Administrative capacity • Level of formal employment • Level of social payment

Tbl. 14. Characteristics Revenue Channel

The central national characteristic of the economy is the administrative capacity of the government. If the scheme builds on the preexisting taxation scheme, then relevant national characteristics are the level of employment and of informal work. Low levels of formal work would make a decrease in labor tax less effective. If the scheme builds on the preexisting social payments, then relevant national characteristics are the level of social payment and whether the poorest households are covered by them. The characteristics are summarized in table 14.

5.1.4 Contextual factors

Throughout all three channels, the direction of the impact is also influenced by a number of contextual factors, characteristics of either the economy as such or of individual households which are not directly part of the implemented climate policy, but are found to be effecting the final impact of the policy (Markkanen & Anger-Kraavi, 2019). Societal characteristics which have been found to encourage a more regressive effect on income distribution are grave poverty, corruption, and preexisting grave economic inequalities (Markkanen & Anger-Kraavi, 2019). Other contextual factors were found to influence the general income inequality directly, but not necessarily impacting the effect of climate policies. While those factors have not (yet) been shown to exacerbate or counter the distributional effect of climate policies, I argue that they can still be included into the analysis as contextual factors since the eventually affect the analyzed outcome – inequality. Most notably among those factors are: Technological change, trade globalization, financial globalization, financial deepening, changes in labor market institutions, and education (Dabla-Norris et al., 2015).

Contextual Factors
Grave Poverty **-**
Grave Inequality **-**
Corruption **-**
Technological change **-**
Trade globalization **?**
Financial globalization **-**
Financial deepening **?**
Labor market institutions **+**
Education **+**

Tbl. 15. Summary Contextual Factors

Technological change is found to generally leading to an increase in labor income inequality. Technological improvements in the production process generally increase the demand for high-skilled labor, thereby increasing their wages while decreasing the demand for low-skilled labor, often making those jobs obsolete. This shift in the demand for labor is often accompanied by an increase in demand for capital, benefitting the capital owners. Trade globalization has a mixed effect on inequality within a given country, it can lead to an increase in income inequality in countries specializing in high-skilled, capital-intensive production, and in countries with an abundance of low-skilled labor it can decrease income inequality. The final effect depends on the characteristics of the respective economy.

Financial globalization is found to increase inequality, mainly through the aforementioned association of capital intensity and high-skilled labor (Dabla-Norris et al., 2015). In addition to the “natural” effect of an increasing global capital mobility on the returns to labor, the potential power disbalance between capital owners and the political and social institutions responsible for the workers can put extra pressure on the development of wages in these regions and can even undermine institutions such as labor unions (Tridico, 2018). Capital owners generally profit from lower wages, and they are therefore incentivized to use their available political power to maximize their own utility.

Financial deepening refers to an increase in access to financial products. Studies have shown a mixed effect, with indications that an increase of the financial sector relative to the whole economy increases the inequality in the beginning, due to the disproportional benefit to the richer parts of society, while the effect decreases after a while. If accompanied by an robust and inclusive financial systems, the end effect can even be positive (Dabla-Norris et al., 2015).

Labor market institutions have generally a positive effect on the income equality, especially strong unions. Similarly, the labor market regulations supported by those labor market institutions generally have a positive impact on income equality (OECD, 2011). Finally, education is also generally associated with a positive impact on equality, but not unequivocally so. A higher education across the society is expected to lead to an increase in equality, and especially if the education offers a good preparation for the skills required in the future labor market. But if the education is distributed unequally throughout the population, then it will also increase the inequality in income (Dabla-Norris et al., 2015). All general contextual factors are summarized in table 15.

In summary, climate policies can impact wealth distribution through the consumption channel, the income channel, and the revenue recycle channel. Regarding the consumption channel, the central policy characteristics are the type of goods impacted and the level of price change, the central national characteristics are the consumption composition, and the good's demand elasticity.

A central factor influencing the demand elasticity is the option of alternatives. Regarding the income channel, the central policy characteristics are sectors affected and the effect on the production process. If the new production process has a higher labor intensity compared to the old production process, then the wages likely rise. The central national characteristics are the relative wages of the affected sector, the size of the sector, the labor-to-capital intensity in the new versus old production process, and the pollution substitutability in the affected sector. A better substitutability of pollution with labor compared to a substitutability with capital similarly indicates a positive effect on the wages.

The central policy characteristics of the revenue channel are the amount of revenue generated and who receives it. The central national characteristics are the administrative capacity, the level of formal employment, and the level of social payment. Figure 2 depicts the interplay of these characteristics.

Any single policy must not necessarily have an affect through each of the channels, especially the revenue recycle channel is only utilized by policies generating revenue. The three channels are nevertheless depicted in one single figure to highlight the interconnection of the effects.

Empirical research on the effects of specific climate policies on wealth distribution are rare but seem to be getting more attention in the last years. Most narrow down their field of research by focusing on one particular type of policy sector. The following sub-chapter provides an overview of these empirical insights.

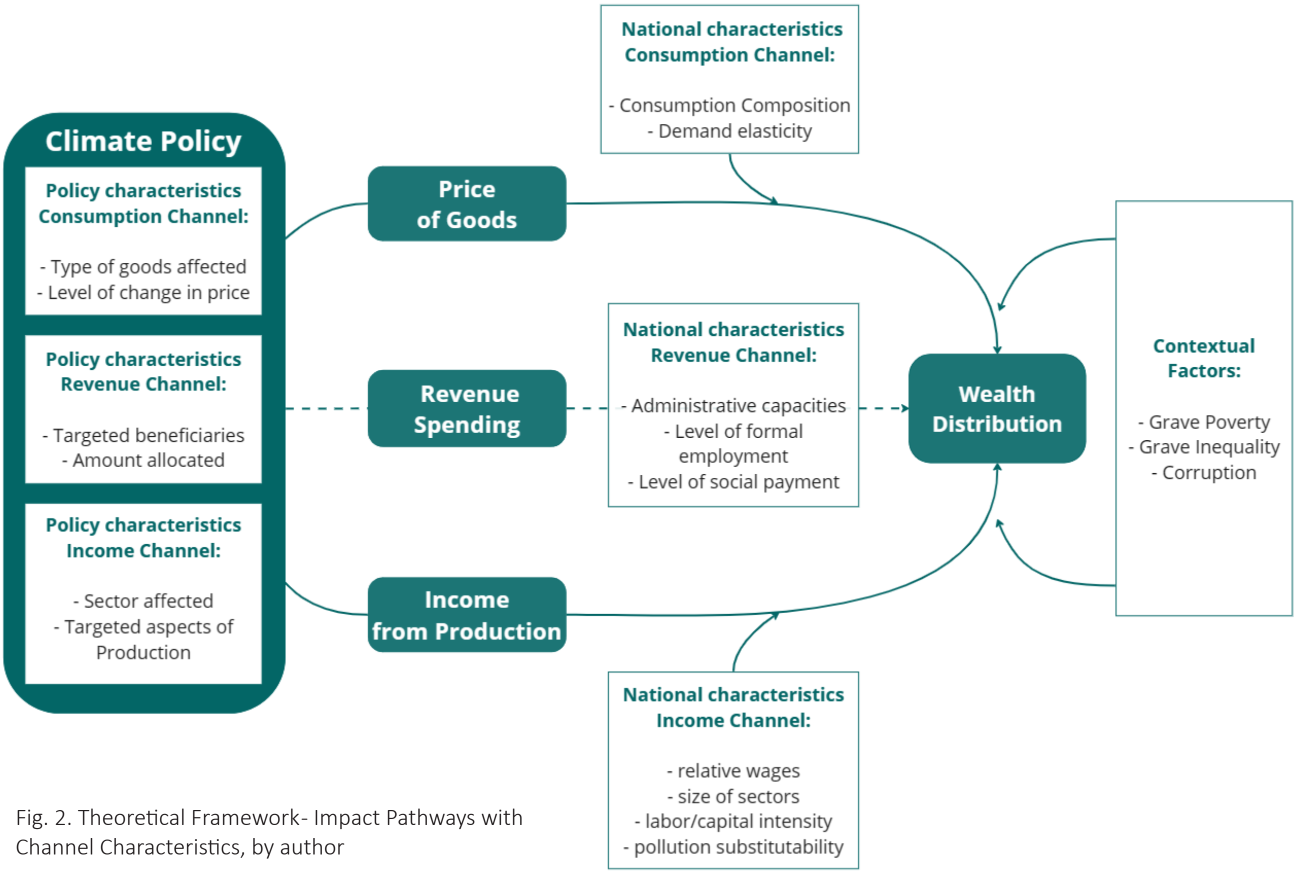

Fig. 2. Theoretical Framework- Impact Pathways with Channel Characteristics, by author

5.2 Literature review policy impacts

Empirical research and literature on the effects of specific climate policies on wealth distribution are rare but seem to be getting more attention in the last years. Most narrow down their field of research by focusing on one particular type of policy. By far the most analyzed sector is energy policy, putting changes in energy prices as the primary influencing factor causing changes in household wealth.

This does seem to be a reasonable focus, given the ubiquity of energy in near all forms of production, and the large share of energy production within the total emissions. But to provide for a comprehensive evaluation of climate policy as such, this sub-chapter expands its scope to include the four sectors repeatedly presented as the heart of EU climate policy: Energy, Buildings, Industry, and Mobility (COM, 2019; European Commission, 2019, 2022d); as well as research into the cross-sector aim of decarbonizing the economy. Since this sub-chapter exists in the service of down the line highlighting the effect of EU climate policy on Moldova, this sub-chapter will focus on research on the effect of EU policies.

Decarbonization Policies

Comprehensive decarbonization policies have been found to be generally regressive, with the final effect dependent on the design of the policy and the spending of the potential revenue. The central tool of the EU for their aim to become emission neutral by 2050 is the EU ETS. A 55% emission reduction by 2030 is expected to be overall regressive, pre revenue spending, with the biggest contributor being an increase in costs for residential energy, which poor households spend a bigger share of their income on, while the rising cost of transportation fuel would burden especially the middle-income households (Temursho et al., 2020).

A lump-sum redistribution of the revenue, as presented above, would likely turn the overall effect around, making the poorest 10% of household better off than before the policy. A more targeted spending of the revenue would consequently increase the progressive effect (Temursho et al., 2020). In general, the emission reduction according to the EU's current plans is expected to have an overall slight positive impact on total employment, but not for all skill types and not all regions (Weitzel et al., 2023).

This differentiation in skill types also impacts the prediction for the future development. Taking into consideration the contextual factors described in the previous sub-chapter, the increase in demand for service-based and high-skilled jobs is expected to lead to a slight increase in income inequality, at least in the short-to medium term, until the supply of the new "green" skills has caught up with the increased demand (Fragkos et al., 2021). García-García et al. (2020) provide a systematic review of research on the effect of "just energy transition to low carbon economies" on labor and income. They also reaffirm these findings, extracting a cautious consensus in the research that the EU climate policy as of 2020 is expected to have a small but positive impact on net employment and a negative net effect on income equality pre-revenue spending.

A report for the Commission reiterates these points and adds a few more perspectives. In addition to effects directly through the internal restructuring, this restructuring also affects the trade relations with the outside world. In the context of the EU, this would especially lead to a shift away from imported fossil fuels towards renewable energy sourced mainly within the EU. This improves the EU's trade balance, can lead to an increase in exports of "green" technology, and creates new jobs (DG EMPL, 2018). The net-employment effect is again expected to be positive, but differing between sectors, with notable increases in construction, agriculture, and power generation and with a notable decrease in employment in mining and extraction (DG EMPL, 2018).

The effects of policies within specific sectors broadly mirror the effects observed from general emission reduction policies but do have some notable differences.

Energy Policies

The effect of climate policies in the energy sector are closely connected to the effects of general decarbonization, since decarbonization puts such an emphasis on energy. Policies targeting the energy sector usually focus on one of two ways to decrease emission, either decreasing the total usage of energy, or shifting the energy source from fossil fuels to renewable energy source (RES). Both the total decrease as well as a shift in sources can affect the wealth distribution through both the consumption channel and the income channel discussed above.

The most important determinant for the effect through the consumption channel is of course the final consumer price of energy. Research into observed shifts[13] has shown that thanks to continuously improving technology and knowledge sharing, a shift to mostly RES would now lead only to a relatively small increase in consumer prices (Clarke et al., 2022).

This positive result does of course depend heavily on contextual factors and will not manifest everywhere. The price would especially rise if the whole grid and infrastructure of the country or region would require major update, a cost that the producers would pass on to the consumers, even if the marginal costs of the production

13 Usually, these shifts do aim to eventually reach the complete obsoletion of fossil fuels, but short-to medium term, they mostly aim to significantly increase the share of RES used, even if 100% is not yet feasible.

itself where not that much higher than the production costs of energy from fossil fuels. This could in cases lead to a net regressive effect (Markkanen & Zálnoky, 2022).

Within the production, a major decrease in production of fossil fuels, whether due to a decrease in total demand, or a shift to RESs leads to a high risk of stranded investments. Globally, a shift to an energy use compatible with the 2 °C goal would, between 2015 and 2050, lead to stranded assets with the value of approximately 4 trillion USD (Shukla et al., 2022, p. 28).

The effect of these stranded assets on the wealth distribution depends again on the context, but under the assumption that investors are predominantly in the upper regions of wealth, this effect has the potential to make the net effect more progressive.

The effect on the total number of jobs is estimated to be positive, so more jobs are created in the RES sectors than lost in the fossil fuel sectors, but importantly, the jobs can be heterogeneously distributed in different regions, so while the net effect might be positive, the effect in particular regions can still be negative (Clarke et al., 2022; Markkanen & Zálnoky, 2022). The effect of energy policies on all SDGs is expected to have more positive co-benefits than adverse effects (Denton et al., 2022).

Importantly, the transition is expected to become more expensive down the line, once the “low hanging fruits” of transition are implemented[14]. For the same reason, the transition is expected to be somewhat less costly in the short run for countries starting from a very fossil fuel-heavy economy who can benefit from knowledge transfers from more green economies, but those costs will rise significantly once the gap becomes smaller (Clarke et al., 2022).

Another major country-specific differentiation is their use of fossil fuels and (potential) use of RES in international trade, whether they mostly import it or export it, and how depend they are on these imports for their economy/on the revenue from these exports (Markkanen & Zálnoky, 2022). In Europe, this reliance is likely leading to a net positive development, since they mostly import fossil fuels and have a high potential for exporting fossil fuels. A strong shift from fossil fuels to RES, both internally and abroad, would therefore have a positive effect on the trade balance as well as on domestic employment (DG EMPL, 2018).

A decrease in total demand for energy would come mostly through changing consumer behavior and through increased energy efficiency both within the production of goods and of the efficiency of end-goods which consume energy. Putting aside the (hard to determine) effects through the production channel, an increase in energy efficiency within the production is expected to lead to an overall decrease in costs of the final product, making the effect likely progressive (García-García et al., 2020). An increase in energy efficiency of end-goods on the other hand can lead to mixed effects. If they lead to higher upfront costs, they can hit the poorest hardest, even if they lead to less energy consumption during its use (García-García et al., 2020).

Factors which decrease the economic burden of the transition – and thereby minimizing the regressive effect

14 Intuitively, the cheapest improvements and shifts will be implemented first, leading to increasing marginal costs of transitioning from fossil fuels to RESs, especially if the absolute demand for energy stays constant or only decreases slightly.

– are technological innovation, international cooperation, behavioral change and an increased integration of energy systems (Clarke et al., 2022). One aspect with an especially high potential of leading to negative effects is the problem of the rare earths and minerals needed for a widespread switch to RESs, a problem born mostly by the global south, benefitting the global north (Denton et al., 2022).

Most specific policy instruments are expected to have a regressive effect, if not counteracted by other policies. Taxes on heating and electricity were found to be usually regressive, so are energy efficiency obligations (Ludden et al., 2021). Similarly, removals of fossil fuel subsidies were found to be usually regressive as well (Markkanen & Anger-Kraavi, 2019). The immediate effect of carbon pricing schemes such as the ETS are usually regressive too, but their final effect depends on how the revenue is spent (Ludden et al., 2021; Markkanen & Anger-Kraavi, 2019).

Large scale renewable energy projects can lead to a decrease in energy prices, making it progressive, but it can counter this effect if it displaces people who used to live in that area (Markkanen & Anger-Kraavi, 2019). Support for small scale renewable energy projects, such as private solar panels, likely benefits middle income households most, who could not have afforded those without the state support, but still have enough disposable wealth to make use of the offer (Markkanen & Anger-Kraavi, 2019).

Incentives to produce more biofuels have the potential to compete with food production and nature conservation, which would be regressive (Markkanen & Anger-Kraavi, 2019). In Europe, biofuels would likely not lead to food insecurity, but this can be a significant risk in regions with a great risk of food shortage and a lack of protection of people's essential needs, especially if high demand from abroad would make it more profitable to export biofuels than to produce food for local consumption (Denton et al., 2022).

Building Policies

The second major area of EU climate policies is the building sector. This sector is again closely linked to the development in the energy sector. Policies in the building sector can impact the wealth distribution mainly through two developments: changes in the construction of the buildings, and the resulting energy efficiency of the building.

Constructing the buildings with greener materials and making them better isolated changes the effect of the production based on the characteristics discussed above, mainly whether this leads to more high-quality jobs and its effect on investment. On the consumer side, these buildings will likely be more expensive, making the direct effect through the consumer channel regressive (Markkanen & Anger-Kraavi, 2019). This effect was found to be usually stronger for the buying-price of houses, and gets less passed through to renters, so the overall effect remains even for renters, but households in the middle, who are able to buy a house, but barely so, are especially affected (Cabeza et al., 2022).

The effect of the increased energy efficiency once built, i.e., excluding the higher upfront-costs, is expected to lead to a lower utilities bill, making it progressive, reversely to the dynamics discussed above (Shukla et al., 2022).

The central climate policies in the building sector are building energy codes, which have a very high potential of mitigating the negative environmental effects, especially if combined with other regulatory instruments (Cabeza et al., 2022). Their effect on wealth distribution depends mainly whether they lead to a net increase or decrease of housing costs (rent/mortgage plus utility bill).

Most building-sector policies seem to be united by a strong dependency on the passing through of costs between landladies and renters. Under the assumption that landladies/ investment companies owning rental real-estate are richer than the renters, the distribution of costs between those two parties is, intuitively, highly influential for the net distributional effect. For example, subsidies for energy efficiency renovations could theoretically dampen most of the polices initial regressive effect, but this is under the assumption that the house owner passes these savings on to the renters, which they don't necessarily do (Ludden et al., 2021).

Similar, proposed EU policies such as revisions to the Energy Efficiency Directive (EED) and Energy Performance of Buildings Directive (EPBD) can have a progressive effect if the net effect for the renter is a lower monthly bill (rent plus utilities). On the other hand, these policies can lead house owners and/or the energy provider to invest in large scale improvements or renovations, and pass on the increased cost indiscriminately to all its consumers, whether their household-unit specifically actually benefits from this improvement or not (Markkanen & Zálnoky, 2022).

Taking this even further, policies like the proposed "Minimum Mandatory Energy Performance Standards" have been found to have a potential to constrict the rental and/or the housing market, if it leads to house owners not selling their house, not renting out the house, or switch from one to the other, depending on the details of the policy, because they are not able or willing to comply with the policy (Markkanen & Zálnoky, 2022).

The impact on the wealth distribution then depends on whether the policy predominantly affects renters, landladies, (prospective) house-buyers or (prospective) house sellers. A ban on the use of fossil fuels in buildings is expected to be net regressive through the increased energy costs, while income tax cuts are likely progressive (Markkanen & Zálnoky, 2022). A renovation obligation of public sector buildings is expected to be progressive, especially if social housings are included. The therefrom artificially high demand from the public sector would also lead to increased investment in the respective research and investments, benefitting private houses down the line through decreasing prices (Markkanen & Zálnoky, 2022).

Mobility and Transportation Policies

The third major area of EU climate policy is the mobility sector. Similar to the energy sector, climate policies in this sector mostly aim to either increase the efficiency of the transportation, i.e., decreasing the demand for energy, or they aim to affect a switch from more harmful forms of transportation to greener alternatives.

Research suggest that in transportation, more so than in other sectors, demand-side policies can be very effective, with quantity and form of transportation-usage being relatively sensitive to both change in price and change in societal sentiment (Jaramillo et al., 2022).

There is a difference between the forms of transportation, the demand for flights is relatively elastic, with a decrease in price leading to a strong increase in flights. The usage of cars versus public transportation on the

other hand is still sensitive to price changes, but not as strongly, and the overall usage of public transport is actually more sensitive to an increase in convenience than an decrease in price (Jaramillo et al., 2022).
This offers the potential for policies in the transportation sector which can lead to a greener development without relying primarily on increases in prices (which, as discussed, are usually regressive) but instead by offering better alternatives. The effects of the analyzed climate policies in the transportation sector are correspondingly more optimistic.

Subsidies for public transportation development and/or use are expected to be progressive, as long as the improvements also affect low-income areas and increase their overall use, not just make the existing options nicer and more comfortable (Ludden et al., 2021; Markkanen & Anger-Kraavi, 2019). Fuel taxes on private vehicles affect mostly the middle income households, since very poor ones tend to not own private vehicles, and very rich ones use a relatively low share of their wealth on fuel (Ludden et al., 2021).
Reversely, subsidies for privately owned electric vehicles benefit the middle the most, as long as the upfront costs still remain too high for the poorest (Markkanen & Anger-Kraavi, 2019). The phasing out of combustion engines can shift jobs from the fossil fuel to the electric vehicle industry and public transportation industry, with the discussed effects and lead to similar effects on the consumers as the previous policies. The shift to electric vehicles, through whatever policy, does pose an extra problem through its use of batteries and technologies relying on rare earths and minerals. The mining of those materials is usually done in very poor countries leading to considerable harm to the workers, the local population, and the local nature (Shukla et al., 2022).[15]
Within the polity increasing its use of electric vehicles, it likely benefits middle income household most, who can afford the upfront-cost of switching to an electric car themselves and/or who have the ability to operate their own small-scale renewable energy generator which they can feed into the grit (Markkanen & Zálnoky, 2022). An increase of electrification of public transport is likely progressive[16] and the increased demand from the public sector likely leads to developments and technology improvements which also benefit private users down the line (Markkanen & Anger-Kraavi, 2019; Markkanen & Zálnoky, 2022).

Industrial Policies

The final area we will detail is the industry sector. “Industry” as such is a bit more nebulous a policy area, and it is closely related to the other areas. As a sector, industry has been less targeted by climate policies so far, but key climate mitigation options are electrification of the production, increase in material efficiency, and circular material flows, and reduction of general demand (Bashmakov et al., 2022; Shukla et al., 2022). This change within the production affects the income channel as discusses, depending on the labor- and capital intensity of the traditional versus green production process. It is also expected to lead to significant costs for

15 The benefit on the other hand is reaped by the economies using the batteries. This is not just a question of fairness and equity, the regional divergence can also increase the tendency to see human suffering as a form of economic externality, a harm not born by the beneficiaries, leading to a failing of the market.
Additionally, the divergence makes the problem politically more difficult to manage, since, corresponding to the economic effect, a policy leading to more harmful mining would benefit the constituencies of the importing polity, while the harm is born by people who the decision-makers are not dependent on. While the question of cost distribution between countries and regions should be a central aspect of policies aiming for just transition, this aspect will be unfortunately sidelined in this thesis, due to its scope and already significant length.
16 This assessment might change if including the opportunity cost for the government of the increased spending on this, as well as the changes in wealth distribution through the change in production/ through the income channel.

the production, but these costs are generally expected to translate into only minor increases in prices of the end product (Bashmakov et al., 2022). Table 16 summarizes all these insights from the empirical analyses:

	Aims	Policies	Tendency of price impact	Central determinants
Energy	↓ total use / switch to RES	Carbon pricing	↘ Regressive	Use of revenue
		Taxes on electricity	↘ Regressive	
		Removal FF subsidies	↘ Regressive	
		EE obligations	↘ Regressive	
		Large RES projects	↗ Progressive	On what land
		Incentivizing micro RES	◡ Benefits middle	Up-front cost
		Incentivizing biofuels	Both possible	Food production
Building	Greener construction/ ↑ energy efficiency	EE regulations	↗ Progressive	↓ Utility vs. ↑ Rent
		Subsidies for renovation	↗ Progressive	Cost pass through
		Very strict requirements	↘ Regressive	Constriction market
		Ban on FF in heating	↘ Regressive	Cost
		Public sector obligations	↗ Progressive	
Mobility	Greening existing/ switch to greener infrastructure	Subsidies for public transportation	↗ Progressive	Increase in use
		Fuel taxes on private vehicles	◠ Burden on middle	Car ownership
		Subsidies for private electric vehicles	◡ Benefits middle	Up-front cost
Industry	Greener Production		Both possible	Investment necessary, energy

Tbl. 16. Summary Effects in Policy Sectors

Chapter Summary

This chapter analyzes the second sub-question:

SQ2: How can climate policies impact the distribution of wealth within an economy?

It finds that:

Climate policies can impact the distribution of wealth through their effect on the price of goods, their effect on the production process, and through their effect on government expenditure.

Regarding the consumption channel, the central policy characteristics are the type of goods impacted and the level of price change, the central national characteristics are the consumption composition, and the good's demand elasticity. Regarding the income channel, the central policy characteristics are sectors affected and the effect on the production process. The central national characteristics are the relative wages of the affected sector, the size of the sector, the labor-to-capital intensity in the new versus old production process, and the pollution substitutability in the affected sector. The central policy characteristics of the revenue channel are the amount of revenue generated and who receives it. The central national characteristics are the administrative capacity, the level of formal employment, and the level of social payment.

Empirical research shows that absent mitigation policies, climate policies tend to be regressive.

6. Moldova´s Socio-Economic Characteristics

Chapter five shows that the final effect of climate policies on an economy strongly depends on the characteristics of the respective economy, the same policies could have opposite effects in two different countries, if their characteristics are sufficiently different.

To analyze the effect of the EU external Just Transition Regime on the wealth distribution in Moldova, we must therefore first detail the respective characteristics of the Moldovan economy. This chapter presents these characteristics and answers the third sub-question:

SQ3: How do the relevant socio-economic characteristics manifest in Moldova?

Chapter four has defined the socio-economic aspects most central to the concept of External Just Transition to be the level of employment, the level of poverty, the social cohesion, and the state of Rule of Law. It further determined wealth distribution to be the central indicator for the first three.

This sub-chapter follows this conceptualization and presents first the national characteristics which chapter 5.1 found to be the central determinants of wealth distribution and second the state of Rule of Law.

If not indicated otherwise, the data refers to the year 2021 and excludes data from the de-facto autonomous region of Transnistria. There were significant developments within Moldovan society and economy in 2022 and even in the last months of 2023. But 2021 is the latest year for which most of the consulted sources provide complete and detailed data. Additionally, the developments following the war in Ukraine and the subsequent stronger orientation of Moldova towards the EU are a still ongoing process. Policies implemented in reaction to these developments will therefore be included as part of the present external Just Transition Regime analyzed in the next chapter.

6.1. Wealth Distribution

Chapter 5 presents the channels through which policies like those within the EU – MD Just Transition Regime can influence this wealth distribution. It highlights the importance of the general contextual factors within an economy and presents specific national characteristics which are central to the final effect of a policy, differentiated into the consumption channel, the income channel, and the revenue recycle channel. This sub-chapter details how these national characteristics manifest in Moldova.

The national characteristics often differentiate between the consumption, income, etc. of the "poorer households" versus the "richer households". This sub-chapter operationalizes this differentiation by contrasting the first quintile (Q1) and the fifth quintile (Q5) per disposable income of the population registered in Moldova, as argued in chapter 3.3 and 5.1. Where appropriate, the data regarding Moldova are contrasted to the respective data in the EU to provide a context for their interpretation.

6.1.1 Contextual Factors

The three most significant contextual factors presented are grave poverty, grave inequality, and corruption. The more those factors are present, the more likely that the same policy would lead to a more regressive effect within that economy compared to an economy with low levels of those factors.

Poverty in Moldova is certainly quite severe. In 2021, Moldova's GDP per capita and by purchasing power parity was around 14 000 US$; the average of the EU MSs at that time was around 46 000 US$ with the lowest in Bulgaria – 24 000 US$ and the highest in Luxembourg – 116 000 US$ (Global Economy, 2022). While nearly no citizen lives below the absolute poverty rate of below 2,15 US$ a day, about 25% of the population live below the national poverty line (World Bank, n.d.).

The average consumption expenditure per household is just below the average income, 3 040 Moldavan Lei (MDL) to the average disposable monthly income of 3 519 MDL[17] , meaning very little can be saved and invested (Biroul Național de Statistică, 2022a). A further indicator is the share of household expenditure on food. The average Moldovan household spent about 42% of their expenditure on food, while the EU average was about 14%; with the highest share in Romania, 25%, and the lowest share in Ireland, 8% (Biroul Național de Statistică, 2022a; eurostat, 2023b).

The level of **equality** is comparable to the EU. The analyzed data do not specify the wealth inequality, therefore I approximate it by analyzing the income and expenditure inequality. The details of the income distribution provide information for the analysis in the next chapters and expenditure distribution is an even better approximation for wealth distribution, since wealthy people are likely to spend according to their wealth, not according to their income.

The Moldovan Gini Coefficient of total disposable income is about 0,311 (Biroul Național de Statistică, 2022a, p. 77). The EU average is around 0,30, with the most equal distribution in Slovakia, with 0,22, and the most unequal distribution in Bulgaria, with 0,40 (eurostat, 2023a).

Comparing Q5 to Q1 in Moldova, Q5 has about three times the income of Q1, 6 120 MDL and 1 951 MDL respectively (Biroul Național de Statistică, 2022a, p. 74).

The expenditure inequality is slightly higher, Q5 has about four times the expenditure of Q1 (Biroul Național de Statistică, 2022a, p. 77). There is also a notable difference in income between the rural and the urban population. The average disposable income in urban areas is around 1,4 times higher than the average disposable income in rural areas (Biroul Național de Statistică, 2022a, p. 16).

Corruption is also higher than the EU average, but still on a medium level if compared with the whole world. In 2022, Transparency International awards Moldova a score of 39 (with 0: highly corrupt and 100: very clean). This is an improvement from 2021, where they got a score of 36. But it is still quite a bit weaker than the EU MS, which had in 2022 an average score of 66, with the weakest MS being Hungary with a score of 42 and the strongest MS being Denmark with a score of 90 (Transparency International, 2022, 2023). The comparisons of the factors are summarized in table 17.

17 In 2021, 100 MDL corresponded to about 4,8 EUR. This makes the average disposable income of 3 519 corresponding to less than 170 EUR. The dataset depicts the average income per household member. In a household with financially dependent members (children, house-husbands or -wifes, etc.), the average income is thereby lower than the income earned by the main breadwinner of the household.

Target	Operationalization	MD	EU weakest MS	EU average	strongest MS
Poverty	GDP per capita, PPP; US$	14 000	24 000	46 000	116 000
	Expenditure on food	42%	25%	14%	8%
Inequality	Gini coefficient (disposable income)	0,31	0,40	0,30	0,22
Corruption	Transparency International	39	42	66	90

Tbl. 17. Summary Comparison Contextual Factors

6.1.2 Consumption Channel

The consumption channel denotes the impact of a policy on the wealth distribution through its impact on the household expenditure. Chapter 5.1.1 states that in this channel, the most relevant characteristic of the *policy* is its effect on the price of goods and the type of goods it affects (most). The central national characteristics of the *economy* are the consumption composition of the poorest and the richest households in Moldova and their demand elasticities. This sub-chapter focuses on the consumption composition since it is more readily observable, and since a deep dive into the demand elasticities of all relevant goods would exceed the scope of the paper.

Policies within the EU external Just Transition Regime will likely have a more progressive effect if they decrease the prices of goods disproportionately consumed by the poorer households or increase the price of goods disproportionately consumed by the richer households. Reversely, policies with an opposite effect would be more regressive.

In the case of Moldova, the differences in the **composition of the spending shares** are rather unsurprising, with the poorer groups spending a larger share of their expenditure on essential goods. The poorest 20% of Moldovans spend an average of about 57% of their expenditure on food and non-alcoholic beverages; 17% on housing, water, electricity, and gas; and 2% on transportation. The richest 20% spend 31% on food and non-alcoholic beverages; 13% on housing, water, electricity, and gas; and 11% on transportation (Biroul Național de Statistică, 2022a, p. 97).

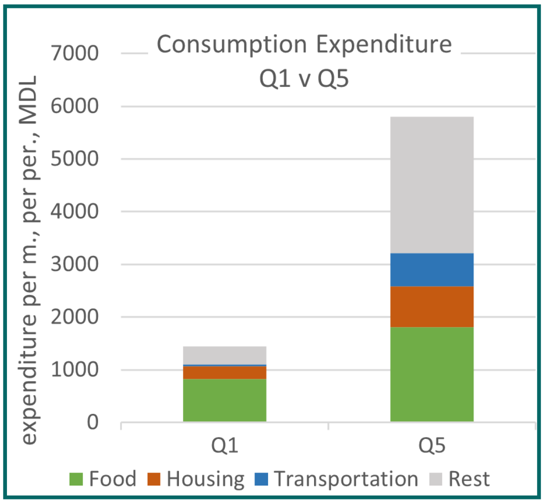

Fig. 3. Consumption Expenditure Q1 v Q5, by author, based on Biroul National de Statistica (2022a)

Figure 3 illustrates the different shares in relation to their respective average total consumption expenditure, 1 444 MDL per month and per household member in Q1 and 5 801 MDL per month and per household member in Q5. While Q1 is spending only a slightly greater share of their expenditure on housing and related costs compared to Q5, the living situation differs quite starkly between them. The differences are especially relevant regarding their impact on heating and other housing-related energy concerns. The residential sector is the largest consumer of energy within the Moldovan economy, making up nearly 50% of the energy use of the economy (Biroul Național de Statistică, 2022b, p. 55).

The income of the residents, their spending on housing, and the **floor space** per housing, are not only interconnected with each other, but also correlate with whether they are set in a rural or urban space. The citizens living in urban areas are on average wealthier than the citizens living in rural areas, with the average expenditure on an urban household being 1,5 times higher than of the average rural household. Especially the very poor live predominantly in rural areas. This does also impact the income-floor space correlation. The average floor space does increase with increasing income both within the urban and the rural population, but unevenly so. Within Q1, both urban and rural citizens have a quite similar average floor space per person (about 18 and 19 square meters respectively). But within Q5, the average floor space of the urban citizens barely increases while the floor space of the rural citizens nearly doubles (to 22 and 42 square meters respectively) (Biroul Național de Statistică, 2022a, p. 118). Figure 4 illustrates this relation and visualizes clearly that the average urban living space of the richest 20% is only barely bigger than the average rural living space of the poorest 20%. Disregarding all other factors influencing the heating costs beside the size of the space, this means that wealthy urban citizens not only pay less of their relative income towards heating, but also only little more in absolute terms.

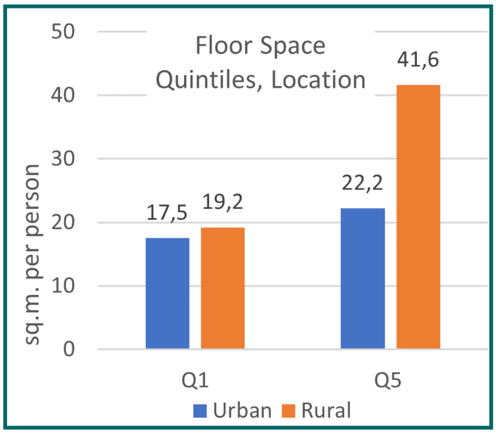

Fig. 4. Floor Space per Location, Q1 v Q5, by author, based on Biroul National de Statistica (2022a)

Similarly, while most of the homes are **single houses**, most of the apartments are inhabited by relatively more well-off people. Only about 30% of the total living spaces are apartments, but contrary to some other countries, the share of apartments goes up with the wealth of the population. Less than 10% of Q1 live in apartments compared to over half of Q5, illustrated in figure 5 (Biroul Național de Statistică, 2022a, pp. 107, 116). Policies benefitting apartments relatively more than individual houses would therefore not necessarily benefit poorer people more.

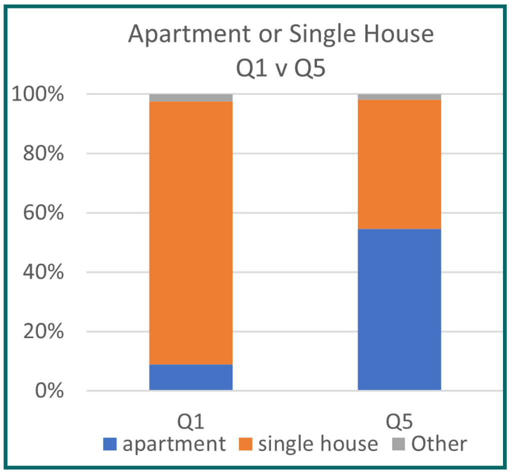

Fig. 5. Share Apartments-Single House, Q1 v Q5; by author, based on Biroul National de Statistica (2022a)

A similar distribution can be observed concerning **renting vs owning** the living space. Only 4% of the total living spaces are rented, with the share in rented places increasing with increasing wealth, although not as drastic as the share in apartments. 2,4% of Q1 rent their space compared to 7,5% of Q5, as illustrated in figure 6.

Interestingly, the share does not continuously increase but rather falls to 1,9% for both the second and third quintile to then rise to 5% for the fourth quintile (Biroul Național de Statistică, 2022a, pp. 107, 116). Policies which put a higher burden on renters than on

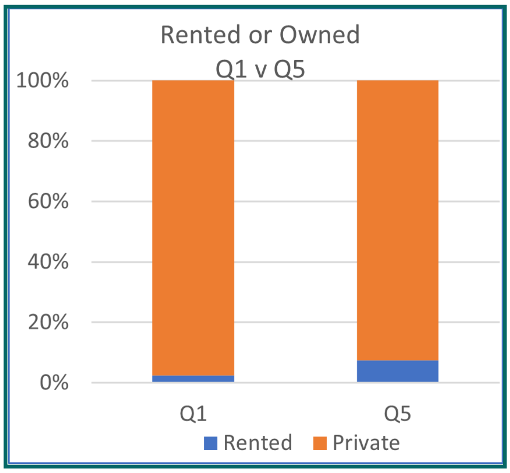

Fig. 6. Share Rented-Owned, Q1 v Q5; by author, based on Biroul National de Statistica (2022a)

homeowners would therefore likely be less regressive than in other countries.

While Q5 has on average only a moderately larger living space compared to Q1, they do have on average quite a few more **energy intensive household goods**. While less than half of the households of Q1 have a notebook or computer, nearly all of the households in Q5 have one. Very similar for washing machines, 48% of Q1 households have one, compared to 93% in Q5. Dishwashers on the other hand are rare throughout, with 1% of Q1 households having one and 7% of Q5 households (Biroul Național de Statistică, 2022a, p. 124). In comparison, around 24% of all Romanian households own a dishwasher and 72% of all German households (Statista, 2023). Air conditions are similarly sparse, being owned by 1% of Q1 households and 15% of Q5 households (Biroul Național de Statistică, 2022a, p. 124).
These differences compound to the percentages presented above, with both Q1 and Q5 spending a comparable percentage of their respective income on the cluster "housing, water, electricity and gas", which correspond to Q5 spending about 3 times the absolute amount of Q1 (Biroul Național de Statistică, 2022a, p. 97).

Another key sector of climate policy is **transportation**. In Moldova, it accounts for about 26% of energy consumption, making it the second largest energy consuming sector after households (STEP, 2022, p. 32). Within the private consumption, we find quite the differences between Q1 and Q5, who spend on average about 2% and 11% of their respective income on transportation (Biroul Național de Statistică, 2022a, p. 97). This difference comes mainly through their use of cars.
A bit less than 30% of total households own a car, with the percentage increasing continuously through the increase in income. In Q1, 13,5% of households own a car, and in Q5, 48% of households own a car (Biroul Național de Statistică, 2022a, p. 119) While this is a noticeable difference between the quintiles, it is also generally low. The EU average is about one passenger car for every two inhabitants, and in Romania, there are about one passenger car for every three inhabitants (eurostat, 2022). The use of public transport is not differentiated between the quintiles in the presented database. Over the total population, about 20% of the expenditure for transportation goes to transport services, while over half of the transportation expenditure goes to personal transportation fuels, maintenance, and equipment. It can therefore be assumed that while public transport is a noticeable part of general transportation, the lions share goes to private vehicles.

In summary, Q1 spends a greater share of their expenditure on food and the housing including utilities then Q5 while Q5 spends a greater share of their expenditure on transportation and have more electrical appliances than Q1. Additionally, renters belong in general to the wealthier parts of society. Policies within the EU external Just Transition Regime will therefore likely have a mostly regressive effect if lead to an increase in the price of food, energy in general and especially heating. Reversely, they will have a mostly progressive effect if they lead to an increase in prices of transportation, fuels for private vehicles, electricity for appliances, or rent. But it should be kept in mind that while there are significant differences between the quintiles, the general consumption is already very low, and even Q5 is often consuming below EU average.
The next impact pathway presented in chapter five is the income channel.

6.1.3 Income Channel

The income channel denotes the impact of a policy on the wealth distribution through its impact on the household income. Chapter 5.1.2 highlights two main ways a climate policy can have this impact. Firstly, between sectors, by impacting the distribution of wages between workers of different sectors. Secondly, within one sector, by impacting the distribution of income between workers and capital owners. A climate policy can be assumed to be more progressive if it either– between sectors – increases the wages of workers in the sectors with lower income relative to other sectors or if it – within the sector – increases the wages relative to the return to capital.

The central policy characteristics are the sectors affected and the aspects of production process targeted. The central national characteristics of the *economy* are – between the sector – the wages in the affected sector relative to the national average and the size of the affected sector and – within the sector – the labor to capital intensity and the pollution substitutability.

This sub-chapter focuses on the national characteristics relating to the differences between the sectors. The data for the labor to capital intensity as well as for the pollution substitutability is both very specific to the respective companies and hard to obtain.

The next paragraphs present the Moldovan level of employment, the composition of income sources, and the distribution of employment and the level of wages between the different sectors.

Interestingly, both the **employment** rate *and* the unemployment rate are very low. In 2021, only about 41% of Moldovans labor force was employed, compared to the EU average of just over 70%, while the Moldovan unemployment rate is half the EU's average unemployment rate; with 3,1% in Moldova and 6,2% in the EU (Biroul Național de Statistică, 2022d, 2022c; eurostat, 2023c). The majority of the people making up the rest, i.e., neither have a job nor are looking for one, are pensioners (about 47%), students (13%), and persons looking for a job abroad (17%) (Biroul Național de Statistică, 2022c, pp. 146, 156). The National Bureau of Statistics does not include international migrants in their classification of "economically active". Their inclusion would lead to a higher employment rate, since most Moldovans who emigrated are working in their new country (International Labour Organisation, 2021).

In the context the employment rate above, "employment" refers to having any kind of job which provides you an income. To gain a deeper understanding of the differences in income, these **sources of income** can be further differentiated into employment (as in non-self-employed), self-employment in agriculture, pension, and others. The average income through these sources differs markedly. The greatest number of households (41,6%) earn their main income as employees[18] with an average income of 4 189 MDL, the second greatest share (34,1%) from pensions with an average income of 2 944 MDL, followed by "other" (10,2) with an average income of 2 811 MDL, self-employed in non-agricultural activities (7,2%) with 3 380 MDL, and lastly self-employed in agriculture (6,8%) with the lowest average income of 2 408 MDL. Notably, a sizable share of the people classified as employees work in agriculture as well (Biroul Național de Statistică, 2022a, pp. 40, 60). Figure 7 illustrates

18 If one household receives their income from more than one of the presented sources, then all members of the household are still classified to belong to the group through which they receive the majority of their shared income.

the share of household incomes, measured on the left, and their average income, measured on the right.

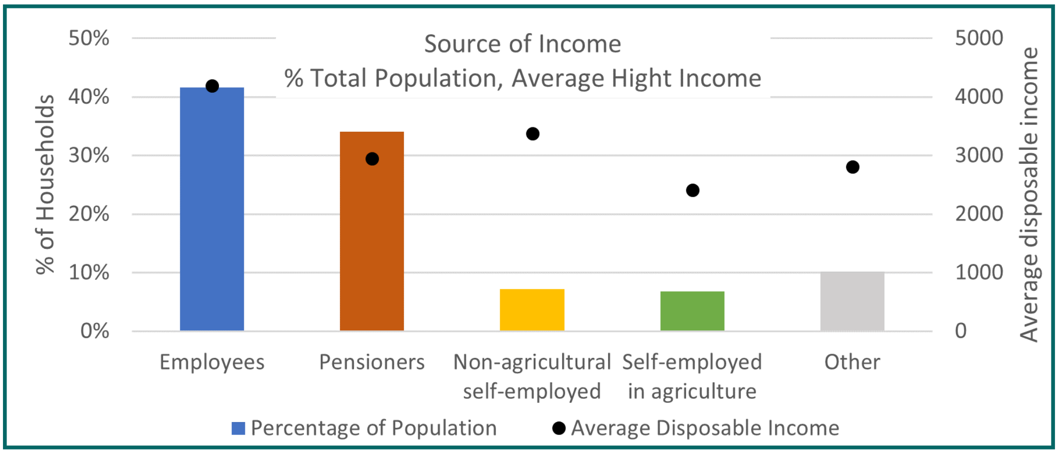

Fig. 7. Source of Income: % Population Hight of Income; by author, based on Biroul National de Statistica (2022a)

The composition of sources of income between Q1 and Q5 unsurprisingly mirror this differentiation. Compared to the other quintiles, Q1 has the lowest share of employees and the greatest share of both people self-employed in agriculture and pensioners. Q5 on the other hand has the greatest share of employees and the lowest share in people working self-employed in agriculture; depicted in figure 8 (Biroul Național de Statistică, 2022a, p. 46).

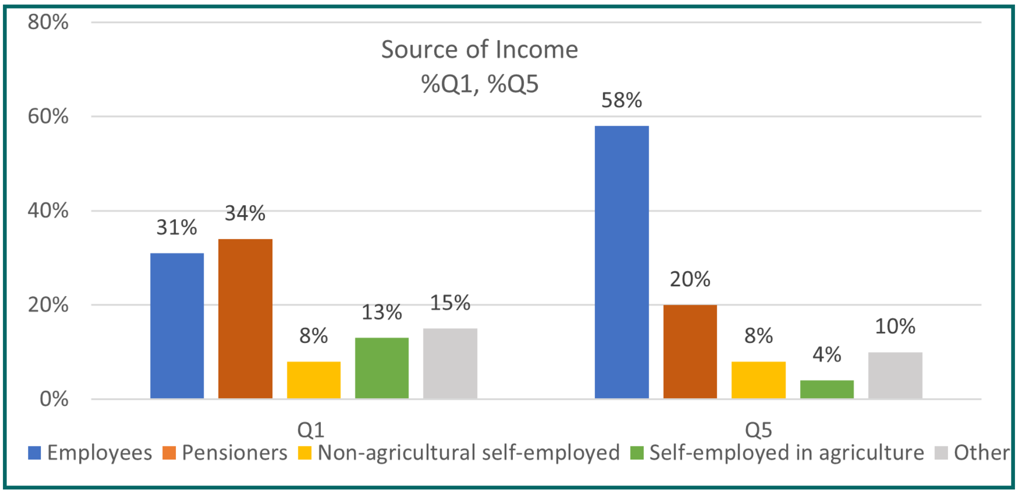

Fig. 8. Source of Income Q1 v Q5; by author, based on Biroul National de Statistica (2022a)

Under assumption of limited labor mobility, policies are therefore likely to have an especially progressive effect if they increase the income of people self-employed in agriculture or the level of pensions. Similarly, under assumption of stable income levels, policies are likely to have a more regressive effect if they facilitate mobility into higher-paying sectors.

Another source of income peculiar to Moldova are **remittances**. Contrary to the just discussed sources, remittances rarely constitute the main source of income for a household, but they constitute a significant additional source for a large number of households. In 2021, personal remittances made up nearly 16% of GDP, and the recent growth of the economy and the decrease of poverty is largely attributed to them (International Labour Organisation, 2021; World Bank, 2023).

Within the total population, remittances make up about 13% of the household's income (Biroul Național de Statistică, 2022a, p. 57). While differing quite between rural and urban households, and between households with different main sources of income, the share of remittances seems to stay rather stable throughout the quintiles. For Q1, remittances do make out the highest share of their income, with 14%, but for Q5 remittances still make out an average of 12% of their income (Biroul Național de Statistică, 2022a, p. 74). Just Transition policies could impact the wealth distribution through changes in remittances possibly through their effect on the Moldovans working abroad and sending the money, or possibly through the effect on the exchange rate between the euro and the MDL, since remittances earned in euro but spend in MDL evidently benefit from a high exchange rate. But since the remittances do not seem to have that significant an impact on the distribution of wealth, this aspect will not be further analyzed.

The lion´s share of workers are employees, and their income is relative to the other sources the highest. But within employment, there is still quite the differentiation between the different **sectors**. Just Transition policies can affect wages and capital returns in any sector, depending on the form of the policy. If a policy increases the wages in a sector with wages below the average income, or if it decreases the wages in sectors with above average wages, then the effect would be more progressive. Reversely, a policy which decreases the wages in below-average sectors or increases the wages in above-average sectors would have a more regressive effect. The National Bureau of Statistics differentiates between 19 sectors of employment. A detailed exploration of each of those sectors would exceed the scope of this paper. This section will therefore focus on the sectors which can reasonably be expected to be most relevant. On one hand, the sectors with the greatest share of employees. If a policy has even a very strong effect on a very small sector, then the overall effect is likely also rather small. On the other hand, the sectors which most likely can be expected to be immediately affected by climate policies.

Figure 9 presents the 19 sectors, their respective shares of employees are indicated on the left hand axis, their respective average wage on the right hand axis (Biroul Național de Statistică, 2023b). Of the presented sectors, only four employ more than 10% of the employees. Trade, with 17%; Education, with 15%; Manufacturing, with 14%; and Health and Social Work with 10%.

The average wage[19] of all employees is about 7 600MDL. This is over twice the above discussed average income per household member of 3 519 MDL. This discrepancy is due to the low employment rate and thereby the high amount of financially dependent household members per (self-) employed person.

The average monthly net wages within the four biggest sectors are mostly below the overall average. The average wage within trade is about 6 400 MDL, the average wage within education is about 6 300 MDL, followed by manufacturing with again about 6 400 MDL, and Health and Social Work with a noticeably higher average of about 9 300 MDL (Biroul Național de Statistică, 2023a).

The tree highest paying sectors are all rather small. Information and Communication pays an average of about 20 800MDL and employs around 4% of all employees; Financial and Insurance Activities pays around 12 800 to

19 In the following elaborations “wage” means “monthly net wage”, if not otherwise indicated. Since we analyze their effects mostly from the perspective of the employee and not of the employer, the net wage is the more appropriate measurement.

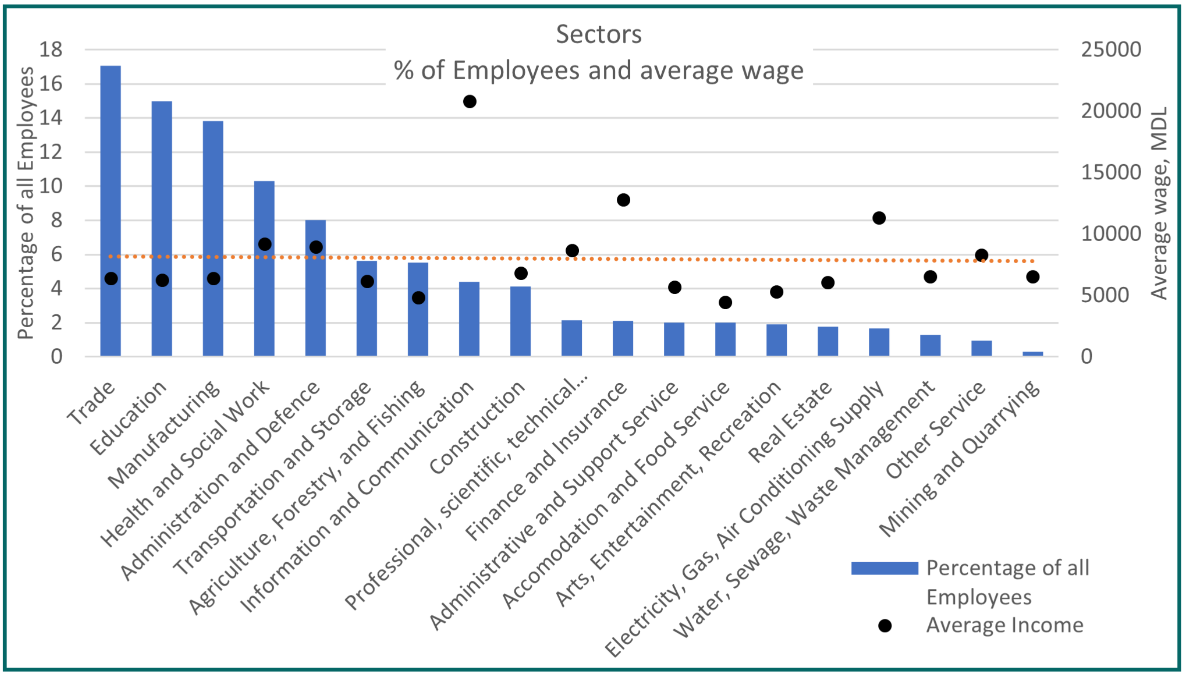

Fig. 9. Sectors of Employment; by author, based on Biroul National de Statistica (2022a)

its share of 2%; and Electricity, Gas, Steam, and Air Conditioning Supply pays about 11 300MDL to its share of 1,7% (Biroul Național de Statistică, 2023a).

The three lowest paying sectors are similarly small. The lowest average pay is paid in Accommodation and Food Service, with 4 500MDL to a share of just below 2%; followed by Agriculture, with a pay of 4 800 MDL to a significantly greater share of over 5%; and lastly Arts, Entertainment, and Recreation, with a pay of about 5 300 MDL to a share of again just below 2%.

A priori it is difficult to definitively state which sectors will be most affected by climate policies in general. The sectors are intricately connected, with developments in one affecting the developments in another sector, being it through labor mobility, change in consumption of one good due to a changing income in another sector, or through any other macroeconomic effect. But in the short term, a reasonable assumption is that those sectors will be most affected which either use a lot of energy or are in the vicinity of the sectors prioritized by the EU climate policy. Those two indicators align quite neatly.

Of the final energy consumption in Moldova in 2021, nearly half was consumed by the households, over a quarter by the transportation sector, about 10% each by services and industry, and less than 5% by agriculture (STEP, 2022, p. 32). The EU puts particular emphasis on the energy sector, buildings, transportation, and industry – see chapter 5.2.

Translated to the 19 sectors differentiated by the dataset, that would indicate that six sectors will likely be especially affected: Electricity, Gas, Airconditioning Supply; Construction; Transportation and Storage; Mining and Quarrying; Water, Sewage, Waste Management; and Manufacturing[20]; depicted in figure 10. Together, all six sectors account for about 27% of all employees, with the majority working in manufacturing.

20 The National Bureau of Statistics defines "Industry" as the sum of the four sectors Electricity, Gas, Airconditioning Supply; Mining and Quarrying; W

The wages in “Electricity, Gas, Air conditioning Supply” are significantly over the overall average[21], the other five are each about 1000 MDL below the average, depicted in figure 20.

In summary, a policy within the EU external Just Transition Regime would have the greatest effect on the overall income if it would increase of the overall employment, if it led to an increase in income from employment, or if it led to an increase in pensions. A policy would lead to a more progressive distribution of income if it increases the income of the people self-employed in agriculture or again the pensions.

Between employees, a policy would have the greatest effect on the overall income if it would affect the sectors of trade, education, manufacturing, or Health and Social Work. It would have the most progressive effect on the wage distribution if it would affect the lowest paid sectors; namely Accommodation and Food Service; Agriculture; and lastly Arts, Entertainment, and Recreation. Of all those sectors of note, only on – manufacturing – is also clearly within the EU priority sectors.

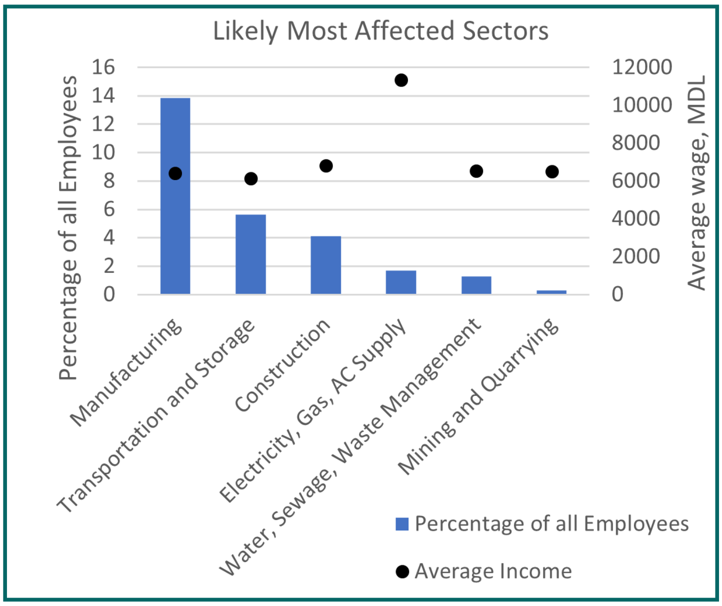

Fig. 10. Likely Most Affected Sectors, by author, based on Biroul National de Statistica (2022a)

Combining all those perspectives, I would argue that a policy would overall be especially impactful if it targets the agricultural sector, trade, or manufacturing.

Agriculture is, while not part of the four EU priority sectors, centrally linked to climate and climate change, and it employs a significant number of people, whether self-employed or employed. Lastly, their pay is particularly low, making an increase not only impactful to the overall income, but would also make the income distribution more progressive. Trade is not part of the EU priority sectors either, but it is closely connected to developments within the EU, since the EU is Moldova’s biggest trading partner, it employs a significant share of employees, and the wage within is below average. Manufacturing is listed as part of industry, thereby part of the EU priority sectors, and it also employs a greater share of employees for below average wage.

The final channel discussed in chapter five is the impact on the wealth distribution through the spending of the revenue generated from climate policies.

6.1.4 Revenue Recycle Channel

Chapter 5.1.3 states that regarding this third channel, the central policy characteristics are the groups of people targeted by the scheme and the amount of money allocated. The central national characteristic is the administrative capability of the government to implement the revenue recycle scheme accurately and efficiently, regardless the specific design. This includes most of the markers summarized under “rule of law”, a reliable

21 The overall average: about 7 600 MDL, the wage in the electricity sector: about 11 300MDL, in Manufacturing: about 6 400m in Transportation: about 6 100MDL, Construction: about 6 800MDL, Water: 6500MDL, Mining: 6 500MDL.

bureaucracy, and access to accurate information on the economic situation of the citizens. If this ability is weaker than the administrative costs are higher, both monetary and non-monetary. Measures such as targeted payments or lump-sum transfers, which chapter 5.1.3 found to be likely progressive, would thereby require significant effort in establishing the necessary administrative structure and would also have a higher risk to not effectively reach the targeted households, and to be misused, i.e., benefitting households who are not intended as the recipients. As the next sub-chapter shows, there are still quite some shortcomings in the government's administrative capabilities.

One way to minimize the administrative costs is to build on an already existing system such as the taxation system. Chapter 5.1.3 found the most promising change in taxation to be a decrease in labor taxation.
But regarding changes to the labor tax, Moldova faces the problem of the substantial size of their informal sector. About 15% of all employed people are informally employed (Biroul Național de Statistică, 2022c, p. 103). And while the share is generally decreasing, it is still widespread, especially in the agricultural and construction sectors (International Labour Organisation, 2021). A high level of informal work is macroeconomically problematic for a whole host of reasons, but in the context of revenue recycling schemes it can also severely undermine the effectiveness of tax-based revenue redistribution.
Another way to minimize additional administrative burden would be to build on the existing social payments. There is already a significant share of the total disposable income derived from social payments, most of which pensions. 18,5% of total disposable income comes from social payments including pensions. Excluding pensions, its 4,5%. Between the quintiles, Q1 receives about 26% of its disposable income from all social payments, and about 11% from non-pensions. Q5 receives about 12% of its disposable income from all social payments, and 2% from non-pensions (Biroul Național de Statistică, 2022a, pp. 57, 74). The non-pension social payment system could therefore likely already reach a significant share of the poorest households.

6.2 Rule of Law

The World Justice Project gives Moldova in 2022 an overall Rule of Law score of 0,52 (with 1,0 being the perfect score), ranking it 68th of the 140 countries assessed (1st being the best), and found a continuous improvement over the last years (World Justice Project, 2023b). The average score of the EU Member States is 0,73; with Denmark ranking highest at 0,9 and Hungary lowest at 0,52 (World Justice Project, 2023a).

This overall ranking summarizes the scores from eight categories: constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice. Within those categories, Moldova shows the lowest score in the category "absence of corruption" and the highest score in the category "order and security". Table 18 presents Moldova's scores in each category, contrasted by the respective lowest and highest scores within the EU. It shows Moldova to be within the range of EU countries in 5 of the eight categories, and

Category	Score MD	EU MS lowest - highest
1) Constraints on government powers	0,50	0,37 - 0,95
2) Absence of corruption	0,37	0,44 - 0,96
3) Open government	0,57	0,44 - 0,87
4) Fundamental rights	0,57	0,56 - 0,92
5) Order and security	0,81	0,71 - 0,94
6) Regulatory enforcement	0,45	0,46 - 0,90
7) Civil Justice	0,50	0,45 - 0,87
8) Criminal Justice	0,39	0,44 - 0,63
Total	0,52	0,52 - 0,90

Tbl. 18. RoL Scores WJP

below in the remaining three.

Chapter 5.1.3 argues that within the scope of this thesis, the regulatory enforcement is of particular importance. With a score of 0,45 in this category, Moldova is still below the lowest score of the EU Member States (Hungary with 0,46), but just barely.

While wealth distribution in itself is not an explicit goal of the EU External Just Transition approach, Rule of Law is. It is, together with democracy and respect for human rights, a core of the stated aims of EU foreign policy. They are also an integral part of the ongoing candidacy procedure and are therefore routinely assessed by the respective EU bodies. These assessments can conveniently serve as sources for the more detailed assessment of the Moldovan state of Rule of Law.

The Commission assesses Moldova's application for membership based on a list of criteria, listed in full in table 19 (COM(2022) 406, 2022). Notably, Rule of Law is explicitly listed. Within the understanding of "Rule of Law" as inclusive of proper implementation and administration of legislation – as established in chapter 5.1.3 -, the sub-criteria "Public Administration Reform" can also be perceived as concerning the material contents of the goal of "Rule of Law".

This "Opinion"[22] , published in June 2022, followed Moldova's official application for membership in March 2022. It provides a preliminary assessment of Moldova based on the aforementioned criteria and concludes with granting Moldova the candidacy status. It concludes with eight recommendations, which Moldova should follow in order to advance further in the candidacy procedure.

Candidacy Criteria
1. Political Criteria 1.1 Democracy 1.2 Public Administration Reform 1.3 Rule of Law 1.4 Fundamental Rights 2. Economic Criteria 2.1 Functioning Market Economy 2.2 Ability to cope with the competitive pressure of the EU 3. Ability to Assume the Obligations of Membership

Tbl. 19. Moldova Candidacy Criteria

Within the sphere of Rule of Law, the Opinion identifies a few areas in particular which still need further improvement, namely the judiciary, the fight against corruption, and organized crime. (COM(2022) 406, 2022). Within the sphere of Public Administration, the Opinion commends recent improvements, but notes that "[f]urther efforts are needed to ensure adequate administrative capacity to develop, implement and enforce legislation" (COM(2022) 406, 2022, p. 5). The concluding recommendations summarize the analysis of the improvements desired by the EU, listing what the EU perceives as the most central weaknesses of Moldova at that time. Most of them concern topics regarding the regulatory setup, more or less closely related to questions of Rule of Law. Summarizing the points, the recommendations call for:

1. Completing a comprehensive justice reform
2. Addressing shortcomings identified by the OSCE and the CoE's Venice Commission
3. Fighting Corruption
4. Eliminating the "excessive influence of vested interests in economic, political, and public life", i.e., de-oligarchisation

22 The full name of the document is "Commission Opinion on the Republic of Moldova's application for membership of the European Union".

5. Fighting organized crime
6. Completing the reform of Public Financial Management
7. Enhancing the influence of civil society on decision-making
8. Strengthening the protection of Human Rights (COM(2022) 406, 2022, p. 16).

Since then, the Moldovan Government has published an “Action Plan for the Implementation of the Steps proposed by the European Commission”, and the developments have been assessed as generally positive, but still needing further improvement (DG NEAR, 2023a; Ermurachi et al., 2022).

In summary, Rule of Law is still in need of improvement compared to EU standards. The EU identifies weaknesses especially in the areas of judicial independence. A lacking state of Rule of Law is not only directly detrimental to the interests of the (majority of) citizens, it also weakens the efficiency of reforms and legislation in all other areas, such as climate policies or social policies.

Chapter Summary

Based on the definitions and delineations defined in the previous chapters, this chapter analyzes the third sub-question:

SQ3: How do the relevant socio-economic characteristics manifest in Moldova?

Table 20 depicts the summarized answer to this question, differentiating between the channels established in chapter five, focusing on how the data manifests in Q1.

Area	Channel	Characteristics	Manifestation
Wealth Distribution	Contextual Factors	Poverty	Severe
		Corruption	Moderate High
		Inequality	Similar to EU
	Consumption Channel	Consumtion Composition	Q1 spends overproportionally on: Food, housing inc. heating. Q1 spends under proportionally on: transportation, electricity, rent.
	Income Channel	Employment	41%
		Source of Income	Q1: main: Employment, Pensions
		Sectors of Employment	Overall most relevant: agriculture, trade, manufacturing
	Revenue Channel	Informal work	High
		Social Payment	High
Rule of Law			Weak

Tbl. 20. Summary Results Chapter 6

This Analysis of the how the relevant characteristics manifest in Moldova provides the foundation for the analysis of the EU external Just Transition policies.

7. The EU Just Transition Regime towards Moldova

This chapter provides the final analysis of this thesis. It has a double objective; it both answers the final sub-question and it answers the overarching research question. The overarching research question asks:

RQ: How does the external EU Just Transition Regime impact the wealth distribution in Moldova?

Chapter six provided an understanding of the aims of EU external Just Transition. This chapter builds on this understanding and details the policies with which these goals are pursued.

The EU does not have one explicit external Just Transition policy, targeting all the aspects detailed above. Rather, the targets are pursued throughout is a wide array of both policies directly with Moldova as well as policies indirectly targeting Moldova. To answer the research question, this chapter therefore first answers the fourth sub-question:

SQ4: What is the external Just Transition Regime of the EU towards Moldova?

The first sub-chapter presents the characteristics which qualify policies as falling under the term "Just Transition regime" in the context of this paper.

The second sub-chapter goes through the policies corresponding to this description. Each policy is first described and presented through the external Just Transition perspective – contributing to answering SQ4. Each policy is then analyzed on its probable effect on the wealth distribution in Moldova – contributing to answering the overarching research question.

This dual approach is intended to allow for an easier and more coherent read, compared to first going through all policies, describing them, and then going through all the policies, analyzing them.

7.1 Framework Just Transition Regime

There is no one explicit external Just Transition policy of the EU. This sub-chapter therefore establishes a framework of what kind of policies are to be included in this regime, based on the characteristics established in the previous chapters, especially chapter four.

The aim of this selection is to collect the most relevant set of policies between the EU and Moldova to answer the main research question. The research question refers to "Just Transition". Just Transition per se includes all three aims equally – climate protection, social equity, and economic growth. A general "Just Transition Regime" should therefore arguably include all policies which primarily aim at either one of the three, and their potential "side effects" on one or both of the other two.

But the scope of this paper establishes a narrower focus, understanding "Just Transition" particularly as policies which primarily aim at climate protection and which can be expected to impact the socio-economic development.

"Socio-economic development" on the other hand has been narrowed down by the first sub-question in this paper. In the context of external Just Transition, the primary aspects of "socio-economic development" targeted by EU external policy are the reduction of poverty, the level of employment, the strengthening of social cohesion, and the strengthening of Rule of Law.

The analysis of this chapter adopts this definition and establishes as first criterion that the policies making up the external Just Transition regime must have climate protection as an objective. It must not necessarily be the only objective though. Climate protection is rather mainstreamed, especially in the external policies. An exclusive focus on only those policies which have only climate-related objectives would therefore exclude many, if not most, of the policies.

Criterion 1: External policies which have climate protection as one of their objectives.

Following again the established scope, the second criterion concerns the socio-economic development. Within the definitions of this paper, a policy can consist of multiple instruments. The scope of the thesis focuses on the socio-economic impacts of the policies. The second criteria should therefore be that the external Just Transition regime should include only those instruments of a climate policy which can reasonably be expected to affect the socio-economic development, namely the poverty, employment, social cohesion, or Rule of Law.
Chapter five, especially the paragraph on revenue recycle schemes, highlights that socio-economic considerations can be included into a climate policy through a respective design of the policy itself, but also through the inclusion of accompanying mitigation instruments. These instruments should reasonably be included in the assessment of the overall effect of the policy, even if the instrument itself does not have a climate objective. The collection of the policies naturally precedes their analysis. Their potential to affect the socio-economic development will therefore be assumed based on my best estimation.

Criterion 2: Instruments which can be expected to have socio-economic impacts.

The next criterion relates to the targeted territory. Both the legal obligations of chapter four and the economic dynamics of chapter five include both external policies as well as internal policies with external effects. The EU and Moldova have very close economic connection and rapidly increasing political connections, internal EU policies can therefore easily impact the socio-economic development in Moldova. Most prominently, either through impacting the trade, or through being part of the EU acquis[23], and therefore being supposed to be transcribed into national legislation at some point. These two impact pathways work quite differently and are therefore grouped into two different categories. It would exceed the possibilities of this paper to include all internal policies with any clime objective, as decided by the first criterion. For internal policies, the criterion should therefore be more narrow, and include only those policies with climate protection as their unrivaled main objective, and which state explicitly some sort of intended external effect.

Criterion 3: Internal policies with climate protection as its main objective and a declared intended external effect.

The last criterion shifts the focus from the objective to the form of the instruments. There are a host of different forms of policies and instruments. To further limit the scope of the framework to an analyzable breadth, only those instruments are included that are either direct agreements, binding Moldova to implement something, or those instruments which directly affect the utility maximization of the Moldovan state, their companies, or citizens. This especially excludes conferences, discussion foras, or similar communicative instruments. These can certainly be very impactful in the longer run, but the causality is too indirect to be included into this regime.

23 The EU acquis refers to the sum of EU legislation that constitute the body of EU rights and obligations. Countries which join the EU must adopt the whole of the EU acquis, countries which wish to join must therefore show that they will be able to do so. Approximation of parts of the acquis can also improve the ease of trade or have other benefits for third countries.

Criterion 4: Instruments bust directly affect the action or profit maximization of the relevant Moldovan actors.

To bring all the policies and instruments which satisfy these criteria into a reasonable order, they are categorizes into one of three groups. The internal policies are presented first because the external policies follow the direction dictated by the internal policies. The first group are therefore the policies which satisfy criterion 3 and their instruments which satisfy criterion 2 and 4. The second group are the external policies which satisfy criterion 1 and their instruments which satisfy criterion 2 and 4. The final group are the developments following the approximation of EU acquis. These are not policies in the usual sense, but they play a central role in the current relations between EU and Moldova, and they can have a marked impact on both climate protection and socio-economic development.

7.2 The Just Transition Regime

Now that that is clarified, what policies are there between the EU and Moldova that fit these criteria?
This chapter follows the just established differentiation and presents the relation between EU and Moldova in three sub-chapters, one on internal climate policies with decided external effect, one on external policies with a decided climate objective, and one on the impact of the approximation to EU legislation in the areas relevant to Just Transition. Each chapter first describes the policies and instruments in place, highlighting how they fit the definition of chapter 7.1 and summarizing their content. Each description concludes with a visualization of the mentioned instruments. Second, each chapter analyses the observed or expected effects of those policies on Moldovan wealth distribution and Rule of Law.

The analyses of the policies are based on three perspectives: on interpretations of the foundational documents, highlighting the effects they intent to have; on analyses of how the policy characteristics of chapter five manifest; and on reports and literature which have explored the respective effects.
The final chapter provides a visualization of all the policies discussed and a summary of the results of the analyses.

7.2.1 Internal Climate Policies with External Effects

The internal EU climate regime is clustered around three main policies, the European Green Deal (EGD), the "Fit for 55" policy, and the "REPowerEU" policy. Their main impacts on Moldova are through their effect on trade, i.e., Moldovan export to and import from the EU, and through their effect as "role models" for the internal policies in Moldova. Latter will be further discussed in sub-chapter 7.2.3, in the discussion around adopting the acquis.

Description

The **EGD** was introduced in 2019 by the Commission and provides a roadmap for the EU to reach net-zero in 2050 (COM/2019/640, 2019). Chapter four details its ambitions as a "global leader". The EU wants to develop green diplomacy, mainstream climate concerns into its trade policy and developmental support, and it puts a special emphasis on supporting its "immediate neighbours", including "strong environment, energy and climate

partnerships (…) within the Eastern Partnership” (COM/2019/640, 2019, p. 20).
An instrument under the EGD with particular impact on the economy at large is the Emission Trading System (ETS). An amendment in February 2023 increased the scope of the ETS, increased the reduction rate of allowances, and introduced a Social Climate Fund (Directive 2003/87/EC, 2003; European Commission, n.d.-c).

Most later and current instruments fall also under the second main policy. The **Fit for 55** package was introduced in September 2020 and increases the ambition of the EGD. I. It calls for a net- reduction of emissions by 55% compared to 1990 and again emphasizes the aim of the EU to “lead by example” and to leverage its economic power to incentivize climate protection abroad (Regulation (EU) 2021/1119, 2021; COM(2020) 562, 2020).
Regarding its external effect, the most significant instrument under this package is the Carbon Border Adjustment Mechanism (CBAM). Established in May 2023, it aims to approximate the effect of the ETS on imported goods through import tariffs mainly on cement, electricity, fertilizers, iron and steel, aluminum, and chemicals (REGULATION (EU) 2023/956, 2023). Additionally, the EU introduced strategies in all its priority sectors.
Within the buildings and construction sector, notable instruments are the Proposal for a Construction Product Regulation, the communication “A Renovation Wave for Europe”, and the proposal for a directive on the energy performance of buildings (European Commission, n.d.-a). The Construction Product Regulation allows the EU to assist third countries in coordinating with its provisions, but there are no obligations to third countries if they are not explicitly established in an respective agreement (COM(2022) 144, 2022). The communication and directive include no direct reference to their external effects (COM(2020) 662, 2020; COM(2021) 802, 2021).
Within the transportation sector, the central instrument is the “Sustainable and Smart Mobility Strategy” (European Commission, n.d.-d). It similarly denotes its intended external effect to be the mainstreaming and coordinating of its transportation goals in all relevant external policies, and to provide technical support and cooperation to third countries (COM(2020) 789, 2020).
Within the industry sector, the central instrument is the “Green Deal Industrial Plan” (European Commission, 2023c). One of its four pillars is open trade and resilient supply chains, calling for the EU to deploy its leverage as a trading power, provide financial support, and ensure a rule-based global economic order (COM(2023) 62, 2023).
The instruments in the energy sector are closely connected to the third main policy.

The **REPowerEU** Plan, published in May 2022, is a reaction to the Russian invasion of Ukraine and aims to counteract the EU’s dependency on (Russian) fossil fuels. It presents additional action to save energy, diversify supplies, accelerate energy transition, and combine investments and reforms. Regarding its external effect, it very clearly focuses on internal cooperation, but it does promise international partners long-term cooperation in integrating hydrogen and renewable energy development, and it introduces the EU Energy Platform, which is open to all Energy Community Contracting Parties, including Moldova (COM(2022) 230, 2022).
The EU Energy Platforms is a temporary measure that aims to decrease the purchasing price of energy through aggregated demand and joint purchasing of gas from suppliers not targeted by the sanctions (Council Regulation (EU) 2022/2576, 2022).

The overall external energy policy is centered around the communication "EU external energy engagement in a changing world", implemented also in May 2022. It references both climate protection as well as security concerns through fossil fuel dependency as central motivators of the strategy, and emphasizes the need for "dedicated partnerships" including "financial support, assistance, technology transfers, and/or enhanced trade relationships" (JOIN(2022) 23, 2022).

These dedicated climate policies show clear intention for external effects, especially through trade. This dual approach is mirrored by the **trade policy,** which shows clear intentions for environmental effects. The central instrument is the communication "Trade Policy Review - An Open, Sustainable and Assertive Trade Policy". The second of six focus areas is "Supporting the green transition and promoting responsible and sustainable value chains", the fifth is "Deepening the EU's partnerships with neighbouring, enlargement countries and Africa", and the focus on green transition is mainstreamed throughout most of the document's provisions (COM(2021) 66, 2021). While not being one of the specific priorities, the document also repeatedly emphasizes the need to support "social fairness", and "social equality".

The following figure 11 depicts the central policies of the internal EU climate policies. The central policies are highlighted in dark green, the surrounding instruments in light green.

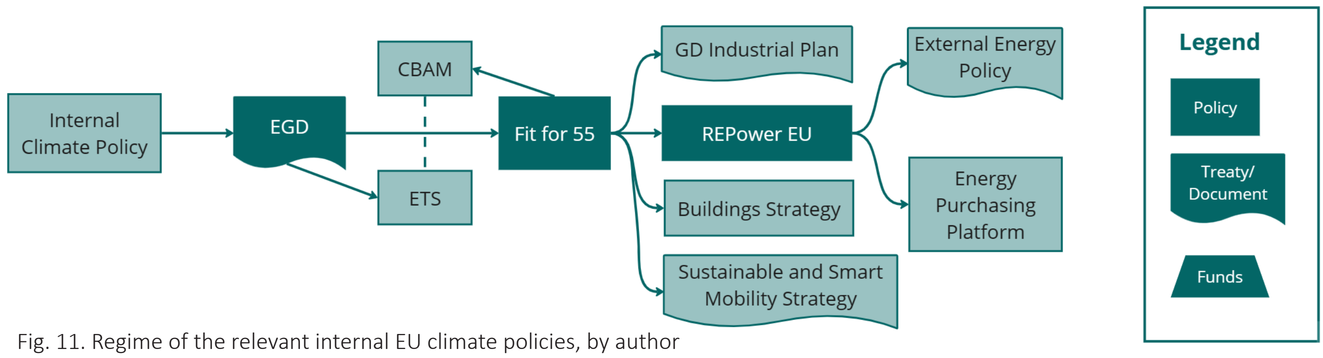

Fig. 11. Regime of the relevant internal EU climate policies, by author

<u>Analysis wealth distribution</u>

As of the model established, the changes in the internal policies of the EU could impact the wealth distribution in Moldova through the consumption channel, the income channel, or the revenue channel. Internal policies changing the working of the EU economy are not generating revenue for the Moldovan government to distribute, this channel can therefore be excluded for this sub-chapter.

Regarding the **consumption channel**, the central policy characteristics are the type of goods affected and the level of change in price. The above-described instruments target a wide variety of goods, with a special emphasis on energy. But despite the specific focus on energy, the EU aims at a holistic approach, exemplified by the multidimensional set of mutually connected strategies and instruments, and the wording of the declarations discussed in chapter four.

While it is still to be seen if the approach can live up to them, the declared intention is to change the whole economy, making climate-friendly goods and processes cheaper and climate-harming goods and processes more expensive (the ETS being a prime example of this aim). Regarding their effects on Moldova, the policy characteristic of "type of goods affected" can be narrowed down by looking specifically at the goods most prominent in their mutual trade. If the EU internal climate policy affects nearly all goods produced in the EU to some extent, then for Moldova, the most affected goods are their imports from the EU. In the first quarter of 2022, Moldova imported from the EU mostly industrial products (81%) and agricultural products (19%), with the three most imported goods being petroleum oils, medicaments, and insulated wire and cable (dcfta.md, 2022). Of those three, only medicaments are directly consumer goods. This focus is continued in the top ten. The top five import good is motor cars for personal transportation, and top seven, eight, and nine are food products (dcfta.md, 2022).

The others[24] are likely (if at all) only indirectly impactful for the consumers. Chapter six highlights that car ownership is mostly concentrated on the wealthier households, an increase in prices for cars due to EU internal climate policy would therefore have a progressive effect. Chapter six further highlights that poorer households spend a very large part of their expenditure on food and are thereby very vulnerable to changes in prices of food. But agriculture is not a particular focus of EU climate policy, nor is the Moldovan import of food products from the EU that significant. Further, there is no academic or political indicators that internal EU climate policy had any impact on food prices. There is therefore no evidence that the internal EU climate policy impacted the trade with Moldova in a way to significantly affect the wealth distribution.

Beside its effect on trade, the internal EU climate policies could also directly impact the price of consumer goods. The description above summarizes that while many instruments do declare some desired external effect, they are usually rather general. The "Construction Product Regulation", the "Sustainable and Smart Mobility Strategy", and the "Green Deal Industrial Plan" do provide the EU with the opportunity to assist third countries with green developments in their respective fields, but there is no evidence of Moldova making particular use of those specific programs.

The instruments under the REPowerEU policy on the other hand do show potential of impacting the price of consumer goods. Their targets include both the reduction of total energy usage and on increasing the share of RES – both of which, if demand-led, tend to be progressive, as shown in chapter 5.2. Especially the EU energy platform, which includes Moldova, is explicitly aiming at decreasing the price of energy, which, if successful, is most likely progressive. It should be noted that this is an rather unusual focus of a policy including climate objectives. The specific context of the Russian war in Ukraine and the therefrom resulting increase in prices of gas gives a rather peculiar "opportunity" to pursue a reduction in gas prices as well as a decrease in use of gas. It is not (yet) definitively observable if the explicit external aspects of internal EU climate policy have any impact on Moldovan wealth distribution, but the focus on assisting developments in areas associated with an increase in equality (transportation, heating insulation) and the focus on decreasing the price of energy leads to the conclusion that if the instruments have an effect on wealth distribution, it is probably progressive.

Regarding the **income channel**, the central policy characteristics are the sectors affected and the aspects of the

24 Top six: insecticides, top seven: corn, top eight: sunflower seeds, top 9: pork, top 10: tractors.

production targeted by the policy. Similar to the effect through the consumption channel, within the EU, the internal climate policy should ideally affect most parts of production and thereby a wide array of sectors and the therefrom earned incomes. Regarding their effect on Moldova, the policy characteristic "sector affected" can be narrowed down by looking specifically at the sectors producing the exports to the EU.

About half of the total exports from Moldova to the EU are agricultural products (51%) and the other half are industrial products (49%) (dcfta.md, 2022). The export of these goods could be affected by the internal EU climate policy. The central instrument within this policy is the CBAM, aiming at approximating the effect of the EU ETS to the goods imported from outside the EU.

Moldovan exports to the EU are expected to be relatively strongly affected by CBAM. Quantitative analyses find that CBAM has the potential to (indirectly) impact up to 5,5% of the total output of Moldova, and to (indirectly) impact more than 2,5% of Moldovan exports to the EU, mainly iron and steel (Magacho et al., 2023; Ülgen, 2023).

This also translates to a significant effect on the income from these sectors. Chapter six presents employment to be the main source of income, with a comparatively higher income. Within employment, both "trade" and "manufacturing" are one of the biggest sectors with wages below the average of employment, but above the average income from all sources of income.

Magacho et al. (2023) even find that of all low-income EU trading partners, Moldova is the country most at risk in terms of wage reduction. They find that in Moldova, the CBAM-induced reduction in exports affects about 2,5% of employment and over 5% of wages. A 2022 study by the French Development Agency finds similar results, predicting around 2% of Moldovan employment to be affected by CBAM (Ülgen, 2023). In terms of its effect on wealth distribution, this actually implies a progressive effect, since it indicates that "relatively well-paid jobs are the ones that would potentially be impacted" (Magacho et al., 2023).

The exports in agricultural goods have a significant potential to affect the wealth distribution, due to the low wages and significant size of the sector, as discussed in chapter six, but they do not seem to be directly affected by the current internal EU climate policy.

Besides its effect on trade, the internal EU climate policy could also affect the income from certain sectors directly, but similar to its effect on prices of goods, there is little evidence on this being a major impact. The EU strategies in the areas of construction, transports, and industry do refer to their intention of supporting the green development of their sectors abroad. But, nearly by definition of the categorization of policies in this paper, the instruments explicitly targeting the Moldovan production processes are mostly clustered around the external policies discussed below. The energy instruments around the REPowerEU policy emphasize the acquisition of energy and less the generation of energy. Moldova produces very little energy themselves, relying mostly in imports, and the energy they do produce is almost entirely made of solid biofuels, thereby a renewable source (STEP, 2022). The biofuels are mostly a byproduct from agriculture, its production is thereby not a specific source of income in itself (STEP, 2022). The effect of internal EU energy policy on Moldovan income is therefore most likely negligible.

In **summary**, the effect of internal EU climate policy on the Moldovan wealth distribution appears to be rather minimal but progressive. The current energy policy probably has an energy-price decreasing effect and the single study by Magacho et al. (2023) suggest a progressive effect on the income, but not through an increase of below-average wages, but through a decrease in above-average wages.

Analysis Rule of Law

The internal EU climate policy does not appear to have a particular direct impact on the development of the state of Rule of Law in Moldova that does not better fit under the next category of policies.

The next policy-area through which the EU external Just Transition Regime could impact the Moldovan wealth distribution is through the external policies with explicit climate objectives.

7.2.2 External Policies with Climate Objectives

The external EU policies targeting Moldova are mainly centered around the European Neighbourhood Policy (ENP), the Eastern Partnership (EaP), and the Association Agreement[25]. All three are highly interconnected.

The ENP is the EU foreign policy framework towards its southern and eastern neighbors; the EaP is encompassed within the ENP and encompasses the relations to Armenia, Azerbaijan, Belarus, Georgia, Ukraine, and Moldova. The Association Agreement is developed within the framework of the EaP and is exclusively about the relation to Moldova. Most instruments targeting Moldova refer to all three policies, but the differentiation can still provide a framework for the organization of the host of bilateral and multilateral relations. I consider an instrument to fall under the ENP if it targets both the eastern and southern neighbors regions, or if similar instruments are available for other ENP countries; to fall under the EaP if it targets only EaP countries; and to fall under the Association Agreement if it targets exclusively Moldova.

Description

The **ENP** was launched in 2004 and revised in 2015. It provides the coordinative framework for foreign policy in the regions with the main aim to "foster stability, security and prosperity in the countries closest to its borders" (JOIN(2015) 50, 2015). The document presents four priorities: Economic Development for Stabilization, Security, and Migration and Mobility. Climate objectives can be found under the first priority, with "Energy Security and Climate Action" as the last of six sub-points.

The main way the EU pursues these objectives is through funding and financial assistance. Most financing instruments of the ENP are collected under the NDICI , the Neighbourhood, Development and International Cooperation Instrument. Money from the NDICI is allocated towards geographic programs – one region being the neighborhood, including Moldova – and towards thematic programs, one of which is the thematic area "Global Challenges" (DG NEAR, 2022). The direction for the next years in each of the thematic programs is specified in Multi-Annual Indicative Programs.

25 Unless otherwise specified, the term "Association Agreement" denotes specifically the "Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Moldova, of the other part".

The Multi-Annual Indicative Program for 2021 – 2027 in the thematic area "Global Challenges" is dubbed "NDICI – Global Europe". Mirroring the Agenda 2030, it presents four priority areas: People, Planet, Prosperity, and Partnership. Climate objectives are mainly collected under "Planet", listed in table 23, and are allocated a total of €793 million (about 20% of the total allocation) and "Prosperity" contains the objective of circular economy (EU, 2021b). While the other objectives are not directly climate related, the whole list together is remarkably similar to a broad understanding of Just Transition[26].

NDICI - Global Europe Objectives
Priority area 2: Planet • Climate change and disaster risk reduction • Environment and natural resources (biodiversity, land, forest, water, oceans, pollution) • Green transition (sustainable energy, green cities, sustainable mobility, green skills and lifelong learning)

Tbl. 21. Climate objectives of the Global Europe thematic program

The fund allocates a total of €260 million to Moldova for the years 2021-2024, 20% of which go to "Environmental and Climate Resilience" and 30% to "Resilient, Sustainable, and Integrated Economy", see table 22 (EU, 2021a). These funds also support some of the instruments presented below under the EaP and the Association Agreement. Notably, the NDICI excludes third countries which are candidates or potential candidates for EU membership (Regulation (EU) 2021/947, 2021 Article 4(2)). Since Moldova is now a candidate country, it will probably be covered by the Instrument for Pre-Accession assistance (IPA) in the future .

EaP **Policy objectives/** ENP priority areas	**Funds** to MD under the ENP, ´21 - ´24
Resilient, sustainable and integrated economy	€78 million
Accountable institutions, rule of law and security	€39 million
Environmental and climate resilience	€52 million
Resilient digital transformation	€26 million
Resilient, gender equal, fair and inclusive society	€52 million

Tbl. 22. Priority Areas EaP

The current IPA, IPA III for the years 2021-2027, has six overarching perspectives, one of which concerns environmental protection, two cover Rule of Law and public administration, and one covers socio-economic development (Regulation (EU) 2021/1529, 2021).

As a country covered by the ENP, Moldova is also viable to receive macro-financial assistance. In 2022, Moldova was granted €150 million in assistance, €120 million as loans and €30 million as grants (Decision (EU) 2022/563, 2022). In reaction to the additional pressure on Moldova in 2022, especially the energy crisis, an additional €145 million - €100 million in loans and €45 million in grants – were proposed in January 2023 and approved by the Parliament in May 2023 (COM/2023/53, 2023; European Parliament, 2023). The macro-financial assistance has preconditions in the area of Rule of Law, but has itself no direct climate objective.

The **EaP**, launched in 2009, is well coordinated with the instruments and objectives of the ENP and also aims

26 The objectives under "Priority area 1: People" are: Health, Education and skills, Gender equality and women's and girls' empowerment, Children and youth, Migration and forced displacement, Decent work, social protection, inequality and inclusion, and Culture.
The full objectives under "Priority area 3: Prosperity" are: Investment climate, private sector, decent work, employment and trade; Circular economy; Quality infrastructure investments and connectivity; Global action to eradicate child labour; Digital transformation; and Resilient and sustainable agri-food systems.
The objectives under "Priority area 4: Partnerships" are: Strategic cooperation with global and multilateral organisations and processes, Economic governance and inclusive societies, Local authorities (EU, 2021b)

to support the objectives of the Paris Agreement and the Agenda 2030 (EEAS, 2022b). The direction for the next few years is codified in the communication “Eastern Partnership policy beyond 2020”, accompanied by more detailed staff documents. It presents five key objectives which correspond exactly to the priority areas of the multiannual indicative program of the ENP detailed above. All priority areas are rather closely related to the area of Just Transition; table 22 presents the five priority areas and the funds allocated to them under the NDICI to Moldova (JOIN(2020) 7, 2020). The key objective on environment contains sub-objectives on health, circular economy, biodiversity, energy security, and sustainable mobility. These goals should be pursued through both investment and good governance. The beyond 2020 strategy shows thereby a stronger focus on climate objectives compared to the previous strategy (High Representative of the Union for Foreign Affairs and Security Policy, 2020).

The central instrument of the EaP beyond 2020 strategy is the Economic and Investment Plan. It identifies eight areas of investment and sets up a number of flagship initiatives per EaP country. Moldova got five flagship initiatives which together got allocated over €1 500 million in grants, loans and guarantees (High Representative of the Union for Foreign Affairs and Security Policy, 2021). The areas of investment and the Moldovan flagship initiatives, detailed in table 23, show a substantial emphasis on climate-related objectives.

<table>
<tr><th colspan="2">Economic and Investment Plan</th></tr>
<tr><th colspan="2">Main areas of investment</th></tr>
<tr><td colspan="2">• Enhanced transport connectivity
• Access to finance for SMEs
• Equality for SMEs
• Digital transition
• Sustainable Energy
• Enervironment and Climate
• Health Resilience
• Human capital</td></tr>
<tr><th>Flagships:</th><th>Support:</th></tr>
<tr><td>1) Supporting a sustainable, innovative, green and competitive economy - direct support for 50 000 SMEs</td><td>About €500 million in grants, loans, guarantees, blending</td></tr>
<tr><td>2) Boosting EU-Moldova trade - construction of an inland freight terminal in Chisinau</td><td>About €30 million in grants and loans</td></tr>
<tr><td>3) Increasing energy efficiency - expanding the refurbishment of district heating systems in resindential buildings in Chisinau and Balti</td><td>About €300 million in grants, loans, guarantees, blending</td></tr>
<tr><td>4) Improving connectivity - anchoring Moldova in the TEN-T</td><td>About €780 million in grants, loans, guarantees, blending</td></tr>
<tr><td>5) Investing in human capital and preventing „brain drain“ - modernization of school infrastructures and implementation of the national education strategy</td><td>About €250 million in mainly grants</td></tr>
</table>

Tbl. 23. Economic and Investment Plan

The EaP also funds a number of programs which contribute to different specific goals of the EU in the EaP countries. Notable for the Just Transition are especially the programs EU4Climate, EU4Environment, EU4Energy, and EU4Business.

EU4Climate aims at supporting the EaP countries in improving their national climate legislation and implement the Paris Agreement. It is funded by the EU and implemented by the United Nation Developmental Program (EU4Climate, 2023). The support for Moldova specifically is planned for the duration of 2019 – 2023 with a budget of nearly one billion euro, and as of May 2023, it achieved results in most of its target areas. The central accomplishments mirror the targeted areas of updating national legislation as well as supporting capacity building, see table 24. (United Nations Development Programme, 2023).

Main Results EU4Climate
• Support in updated **National Determined Contribution Plan** • Update of **Low Emissions Development Strategy** • Draft of amendments to the national monitoring reporting and verification (**MRV**) System for Emissions • **Capacity building** of government officials to: - develop Long-Term Low Emissions Development Strategies - improve adaption planning - improve efficiency of national MRV systems

Tbl. 24. Climate objectives of the Global Europe thematic program

EU4Environment aims at supporting the EaP countries in preserving their natural capital and greening their economies. It is funded by the EU and implemented by the OSCE, the World Bank, and different UN programs; with an planned duration from 2019 – 2024 and a total budget of about €20 million (EU4Environment, 2023a). The support for Moldova specifically includes support in the development of green investment strategies, support with the development of Strategic Environmental Assessment and Environmental Impact Assessment laws, and projects such as Eco-industrial parks (EU4Environment, 2023b).

EU4Energy aims to support the EaP countries in implementing sustainable energy policies and to increase the cooperation of their energy sectors. It is funded by the EU and implemented in cooperation with the International Energy Agency, the Energy Community, and the Council of European Energy Regulators. Its second phase has a planned duration from 2021 to 2025 and a total budget of nearly €6 million (Energy Community, n.d.; EU4Energy, 2022b). For Moldova in 2023, EU4Energy has six central activities planned, most supporting the transposition of EU acquis into the national legislation, see table 25 for the details (EU4Energy, 2022a). EU4Business specifically focuses on the support to small and medium enterprises (SMEs) in the EaP countries through three pillars: access to finance, business development services, and business enabling services. It is both funded and implemented by the EU and supported by various international banks and organizations (EU4Business, 2023). In 2021, it supported Moldova with nearly €120 million reaching over 6 000 SMEs (EU4Business, 2022).

Central Activities EU4 Energy
Area 1: Renewable Energy
Support transposition of the recast **Renewable Energy Directive** 2018/2011
Area 2: Electricity Market
Support the MD national regulatory authority in preparing the study on the national **electricity market functioning** in line with the Law on electricity and best EU practices
Support MD in improving the national legislation for ensuring the **cross-border exchange and sharing**
Area 4: Energy Efficiency
Support implementation of the obligation regarding the **renovation of the buildings** owned by the authorities of specialized central public administration
Support in the alignment of the national **energy labelling framework** to the EU acquis
Area 6: Capacity building
Organization of workshops/events/capacity building exercises relevant to the Work Programme for ministries, regulators, TSOs and other beneficiaries aiming to increase of **institutional capacities** in MD

Tbl. 25. Central Activities EU4 Energy in 2023

The **Association Agreement** codifies most of the specific action between the EU and Moldova. It does contain climate considerations, but they are not the focus. Article 1 lists eight central objectives, none of which are primarily climate related. Of four general principles, one reiterates the “commitment to the principles of a free market economy, sustainable development and effective multilateralism" (Association Agreement EU-MD, 2014 Article 2(2)). Further specifications are given in chapter 13 on trade and sustainable development.

The direction for the next years is detailed in the Association Agenda for 2021-2027, which shows a stronger focus on climate concerns. It presents five overall objectives, with again perfectly correlate to the priority areas of the EaP as well as the ENP, see table, including the objective for "Resilient, sustainable and integrated economies" and for "Environmental and climate resilience" (COM(2022) 69, 2022).

One of the central aims of both the Association Agreement and of the therein established Deep and Comprehensive Free Trade Area (DCFTA) is the transposition of EU acquis. The annexes to the Association Agreement list the specific EU legislative acts that are supposed to be approximated within Moldovan law, including a host of climate related legislation. This approximation is detailed in the next sub-chapter.

In February 2023, the representatives of Moldova and the EU met for their seventh Association Council meeting. They highlighted a host of different instruments the EU has implemented in the last years to support Moldova, usually some kind of financial support conditional on certain reforms (Council of the EU, 2023). The main instruments presented are the Economic Recovery Plan; the Moldova Support Platform; the European Peace Facility; the above detailed macro-financial support, EaP Economic and Investment Plan, and EU Energy Platform; and a number of other instruments not falling under the scope of this paper[27]

The Economic Recovery plan aims to support the economic recovery from the pandemic. In the duration of 2021- 2024, it intends to mobilize up to €600 million in grants, investments, and guarantees; conditional on structural reforms (EEAS, 2022a; European Commission, 2021a). The plan targets five areas: public finance management and economic governance; competitive economy, trade and SMEs; infrastructure; education and employability; and the rule of law and justice reform. The last area also contains the main conditionality of structural reform in the field of justice and anti-corruption.

The Moldova Support Platform was initiated by Germany, France, and Romania in response to the repercussions of the Russian Invasion of Ukraine. It includes all EU MSs, the G7 countries, and international partners (European Commission, 2022c). The Commission contributed around €250 million, 100 million in loans and 100 million in grants to help Moldova with its gas purchases and the remaining 50 million are targeted budgetary assistance to "those most vulnerable" (BNE IntelliNews, 2022). The European Investment Bank contributes another €280 million in loans and €16 million in grants for 2022 and announced another approximate €150 million (European Investment Bank, 2022). While the support from the Commission intends to mainly facilitate the purchase of gas itself, the EIB loans directly target Just Transition considerations, aiming to "help Moldova mitigate the economic and social effects of Russia's invasion of Ukraine" through investments in transport, energy, and healthcare projects (European Investment Bank, 2022). The European Peace Facility supports the Army of Moldova with €40 million over a time of three years (Council Decision (CFSP) 2023/921, 2023).

27 Notably a cooperation between the European Public Prosecutor's Office and General Prosecutor's Office of Moldova, the Visa suspension mechanism, and an EU – Moldova high-level dialogue on energy.

The following figure 12 depicts these central instruments of the external policies, with the central policies in dark green, the surrounding instruments in light green, and the shade differentiating between policy, fund, and treaty.

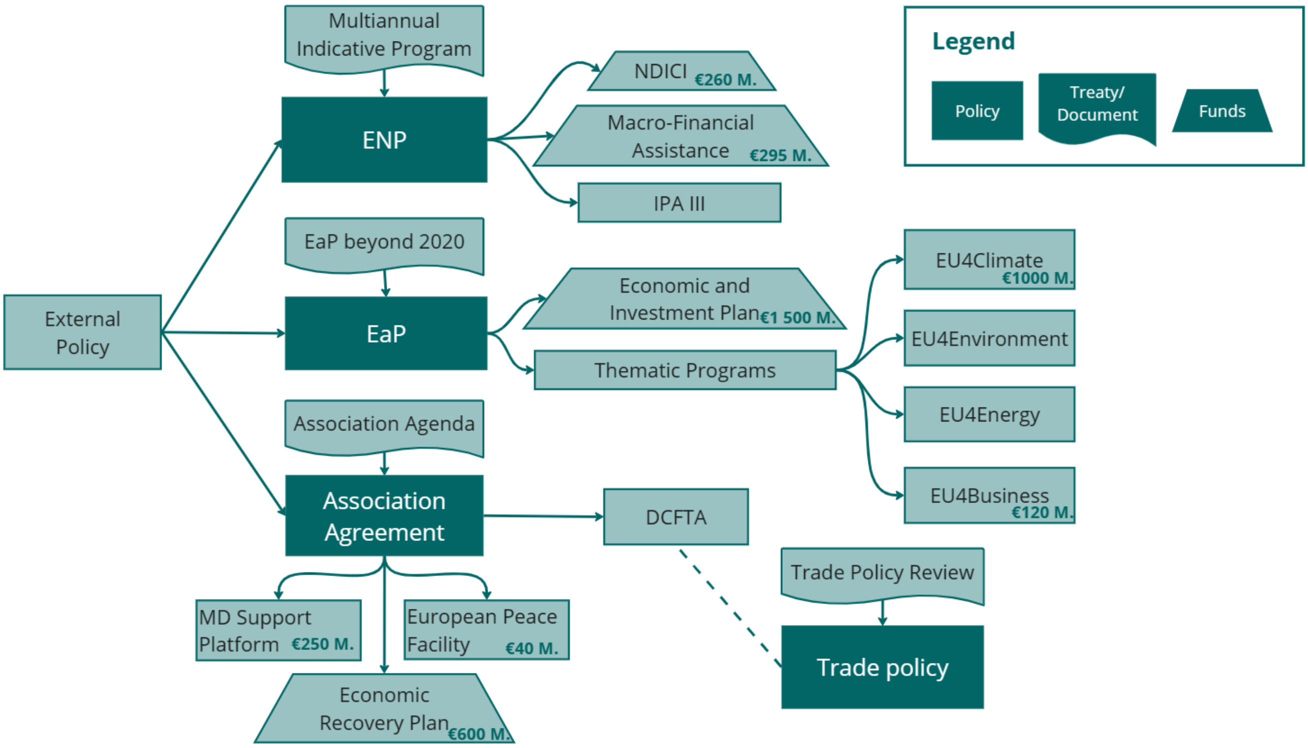

Fig. 12. Regime of the relevant external policies with climate objectives, by author

Analysis wealth distribution

Contrary to the internal EU climate policy, the instruments under the ENP, the EaP, and the Association Agreement intentionally target Moldova. This allows for an analysis of their intended effect through their founding documents. The intended effects must not necessarily be successfully achieved, but under the assumption that the EU is somewhat effective in their policymaking, the actually achieved outcomes of the policy should at least not be contrary to the intended effects.

Chapter 4.3 argues that wealth distribution is the most appropriate indicator of the EU aims, but it is not in itself included in the general external Just Transition aims of the EU. This actually changes if we look closer at the foundational texts of the discussed external policies. There, we do find explicit references to wealth- or income equality.

The 2015 framework for the ENP presents very ambitious and comprehensive targets. The priority "Economic Development for Stabilization" takes a very wide understanding of the roots of instability.

"The EU's approach will seek to comprehensively address sources of instability across sectors. Poverty, inequality, a perceived sense of injustice, corruption, weak economic and social development and lack of opportunity, particularly for young people, can be roots of instability, increasing vulnerability to radicalisation." (JOIN(2015) 50, 2015)

The Multi-Annual Indicative Program for 2021-2027, includes the explicit objectives to pursue "decent work, social protection, inequality and inclusion" as well as "economic governance and inclusive societies", and the need for a fair distribution of costs and benefits of climate protection measures is repeatedly stressed throughout the document (EU, 2021b).

The documents elaborating on the EaP priorities go even further, and into more detail. While it is not presented as a top priority, aspects of Just Transition are mentioned throughout.
On the general approach, the most recent guiding document "EaP policy beyond 2020" states:

> *"Strengthening the economy is key to meeting citizens' expectations, reducing inequality, and making partner countries places where people want to build their futures. Better-integrated economies that are inclusive, sustainable and fair, deliver for all. The aim is to create decent jobs and economic opportunities, ensuring prosperity for people living in the partner countries." (JOIN(2020) 7, 2020, p. 4)*

Similar, the more detailed working document on "post 2020 Eastern Partnership priorities" states:

> *"The net-zero transition in general and the renewable energy sector have great potential in creating the value and jobs of tomorrow's economy. The economic output and jobs to be created through renewable energy and energy efficiency outweigh traditional energy sector jobs. Policy measures are needed to fairly distribute those transition gains throughout society, ensuring it is just and inclusive." (High Representative of the Union for Foreign Affairs and Security Policy, 2021, para. 2.3.2)*

Both paragraphs repeat the focus on job-creation and economic prosperity found in chapter four on the general EU goals. But within their general descriptions of "places where people want to build their future", they go further than those previous texts in explicitly mentioning economic equality. The "EaP policy beyond 2020" " directly calls for an inclusive and fair economy. Whether one understands the call for a fair economy to mean a call for an economy that reduces wealth disparities depends on one's view of the world and the economy. It also calls to "reducing inequality" but without specifying the kind of inequality. The analyzes EU documents refer with "equality" usually to gender equality, sometimes to racial or ethnic equality. The wording of the cited paragraph is open for interpretation in this regard, but within the context of the surrounding objectives, it would arguably either way aim against fostering an economy that increases the wealth disparities. The "post 2020 EaP priorities" go even further and call directly for a fair distribution of the transition gains.

The Association Agreement, the most Moldova-specific of the three policies, doesn't continue this call for equality. But it does continue the general commitment to the goal of Just Transition and also details specific aspects a bit further. Article 2(2) reiterates the commitment to sustainable development. Chapter 13 details the provisions on "Trade and Sustainable Development". The focus in these articles is mostly the aspect of labor protection. Chapter 4 details the provisions on "Employment, social policy and equal opportunities". These articles do not introduce any major new aspects, but they do provide a (non-exclusive) list with issues they perceive as most essential to the topic of the chapter. The goal is to promote "more and better jobs, poverty reduction, enhanced social cohesion, sustainable development and improved quality of life" (Article 31 Association Agreement). In order to reach this goal, the EU and Moldova may cooperate in any of the areas listed in Article 32 Association Agreement:

a. *"**poverty** reduction and the enhancement of **social cohesion**;*

b. *employment policy, aiming at more and **better jobs with decent working conditions**, including with a view to reducing the informal economy and informal employment;*

c. *promoting active labour market measures and efficient employment services to m**odernise the labour markets** and to adapt to labour market needs;*

d. *fostering more inclusive labour markets and social safety systems that **integrate disadvantaged people,** including people with disabilities and people from minority groups;*

e. *efficient management of **labour migration**, aiming at strengthening its positive impact on development;*

f. *equal opportunities, aiming at enhancing **gender equality** and ensuring equal opportunities between women and men, as well as combating discrimination on all grounds;*

g. *social policy, aiming at enhancing the level of **social protection**, including (…);*

h. *enhancing the **participation of social partners** and promoting social dialogue, including (…)*

i. *promoting **health** and safety at work."*

(Article 32 Association Agreement EU-MD, 2014; emphases added)

Similar to the understanding of Just Transition presented in chapter four, this list includes paragraphs on health (i.), labor rights (b. h.), and on social cohesion (a., d., e., f.). Additionally, it mentions the setup of the labor market as such (c). While covering a wide array of rather detailed targets, the language of the provisions in the Association Agreement indicate that they are more a guideline for potential aims, and do not provide an obligation to pursue them. Article 31 Association Agreement states that the EU and Moldova "shall strengthen their dialogue and cooperation on promoting [the goals]"; article 32 states that cooperation "may cover" the areas listed above, and the additional articles use similar phrasing as well.

Whether the instruments surrounding and implementing these policies are successful in achieving those rather comprehensive targets is difficult to determine, but a look at our model can again help to gain some insights into the dynamics at play.

Regarding the **consumption channel,** the central policy characteristics are the type of goods affected and the level of change in price.

As presented above, the external policies include a vast range of instruments potentially targeting a vast array of goods. Many of the above listed financial instruments put a special emphasis on supporting the energy sector, most notably the recent increase of the micro-financial assistance. Both the general insights of chapter 5.2 as well as the national characteristics presented in chapter six suggest that a decrease in energy prices can be expected to have a progressive effect.

The economic and investment plan declares the plan to support SMEs, boosting trade, improve energy efficiency, improve Moldova's transportation connection, and invest in human capital. According to the generally expected effects presented in chapter 5.2, an improvement in energy efficiency can be expected decrease the energy prices, having a progressive effect. Support of SMEs and an increase in trade could be both progressive and regressive, depending on the effect on the price of the goods produced. Better transportation infrastructure should make the transportation of goods more affordable, which could lead to a decrease in the final price and/

or access to a wider variety of goods. Investment in human capital affects more the income, which is discussed below.
The other instruments under the EaP and the Association Agreement show a similarly limited direct effect on consumer goods. EU4Climate, EU4Environment, and EU4Energy under the EaP as well as the Economic Recovery Plan, the Moldovan Support Platform, and the EU Energy Platform target a wide variety of institutional and legislative developments in Moldova, but their only significant immediate effect on consumer goods seems to be on the price of energy. A successful decrease in energy prices would be progressive.

A more varied effect on consumer goods could come through the DCFTA. An evaluation by the Commission finds that the "DCFTA's impact on consumers has generally been positive, due to improved access to a variety of higher quality products, including locally produced products" but could not detect a direct impact on the price of the consumer goods (Akhvlediani et al., 2022).
A similar report by the Commission evaluates the cooperation under the Association Agreement up until 2020. It does not present specific impacts on prices of goods either, but it finds more general impacts on consumers primarily through an increase in energy efficiency and through improved access to water and sanitation services. The access to better water and sanitation is mentioned repeatedly as one of the major achievements, enabling "direct access to improved water and sanitation services provision for about 1.4 million citizens" (Landell Mills, 2021, p. 86). It seems safe to assume that this access benefits mainly the poorest parts of society, making the effect progressive. The improvement in energy efficiency stems to a significant part from improved energy efficiency in public buildings, encourages also by financial support (Landell Mills, 2021, p. 86). As detailed in chapter 5.2, this kind of energy efficiency measure is especially likely to have progressive effects.
An ex-ante Trade Sustainability Impact Assessment of the DCFTA on the other hand finds a strong potential for a slight regressive effect. "The poorest part of the population will benefit less from the DCFTA, mainly because food prices will increase slightly" (Ecorys, 2012). Chapter six shows that the poorer households in Moldova spend over half of their expenditure on food, an increase in food prices would therefore be decidedly more regressive.

Regarding the **income channel,** the central policy characteristics are the sectors affected and the aspects of the production targeted by the policy. The expected effect on the income is closely related to the effect on the price of goods, since changes in the production process can affect both the income of the workers and the price of the goods.

The described instruments contain few specific references to specific sectors. Both the Economic and Investment Plan heavily emphasize the support to SMEs. Chapter six details that people self-employed in non-agriculture, which would include the owners of SMEs, earn on average slightly below average. It does not give any detail of the income of employees of SMEs versus employees of large enterprises, but SMEs make up about 99% of all enterprises in Moldova, it seems therefore appropriate to assume the average income of SME employees to be approximately the income of all employees (Landell Mills, 2021).

Another target mentioned in multiple instruments is the need to invest in corporations, improve the business-environment, and modernize the production process. These developments are generally associated with a high risk for a regressive effect (Dabla-Norris et al., 2015). As detailed in chapter 5.1.4, a modernization of the production process usually increase the demand for high-skilled labor, thereby increasing their wages while decreasing the demand for low-skilled labor, often making those jobs obsolete. It also usually increases the demand for capital, benefitting the capital owners. But Moldova might be a bit of a different situation. The productivity of Moldovan production is generally very low, especially in agriculture (Biroul Național de Statistică, 2022c). In addition, Moldova has an exceptionally low employment rate combined with an exceptionally high rate of citizens working abroad, mostly due to a lack of opportunities in Moldova, see chapter six. This suggests that the current demand for (skilled) labor exceeds the potential supply. An increase in modernization and productivity could therefore provide opportunities for both more employment as well as better pay for these jobs. This could translate to an increase in equality if it provides also the poorest with a higher income. Chapter six shows that this would be most pronounced if it increases the income of people working in agriculture.

A very similar effect could come from increased access to finance. Studies indicate that increased access to finance can first especially benefit the already more well-off companies, businesses, and their owners, who have the connections and know-how to use this access (Dabla-Norris et al., 2015). This could very well be the case in Moldova, where many of the very small enterprises and especially very small farms lack the ability or willingness to comply with the sometimes quite confusing procedures of the EU (Akhvlediani et al., 2022). The ambitious declarations in the EaP documents, the EU4Business program, and the Association Agreement would foster some hope that the financial instruments are designed in a way to allow access for as wide an array of applicants as possible.

The reports on the effects of the Association Agreement and of the DCFTA support this assumption of a limited, but positive effect on the wealth distribution. "The direct effects of the DCFTA on wages, sectoral employment and household income are not clearly visible over the analysed period. Despite the growth in wages between 2015 and 2018, it is difficult to identify a direct correlation between this growth and the implementation of the DCFTA" (Akhvlediani et al., 2022). This report does on the other hand find a positive impact on the quality of work. "As a result of strengthened trade links with EU companies, corporate social responsibility, human rights, labour standards and environment and climate aspects have improved" (Akhvlediani et al., 2022).

The effect on SMEs was found to be limited, mostly due to the limited role of SMEs in the EU – MD trade. The general SME support within the Association Agreement was found to have a stronger impact then the DCFTA alone. "EU-supported SMEs generated additional income of EUR 345 million, created 21,926 new jobs, and increased exports by 3%" (Landell Mills, 2021). But the situation is still rather bleak, and many improvements in legislation are not sufficiently implemented.

Regarding the **revenue recycle channel**, the central policy characteristics are the targeted beneficiaries and the amount allocated. None of the above-described policies indicate the establishment of climate policies which generate an explicit revenue. Nevertheless, the framework of the revenue recycle channel does not make an analytic distinction by the source of the money spent, the effect on wealth distribution should only depend on how it is spent. Therefore, the framework can still be useful for the analysis of a very prominent part of the above-described policies, financial support.

The external policies include quite a substantial amount of financial support, both in the form of loans and of grands. During the last Multiannual Financial Framework, from 2014 – 2020, received more than €500 million in grants and additional €200 million in grants and loans under the macro-financial assistance programs of these years (DG NEAR, 2023c). The support under the current Multiannual Financial Framework, from 2021 – 2027, will most likely only increase, since the current crises have led to additional financial support. But the financial instruments generally go to the government to distribute and are not earmarked to benefit certain groups of people.

The indicative bilateral allocation under the NDICI for the years 2021 – 2024 was €260 million, (DG NEAR, 2023c). €52 million of those funds is allocated to the objective of "Resilient, gender equal, fair and inclusive society", but the document does not clarify if this means that the funds will primarily support poorer households (EU, 2021b, 2021a).

The current macro-financial assistance adds up to €295 million, €75 million in grants and €220 million in loans, see description above. It is conditional on certain pre-determined structural reforms, mostly in the area of Rule of Law and good governance, but it does not specify how the loans and grants must be spent by the Moldovan government (European Commission, 2022a).

The Economic and Investment Plan follows this approach and does not specify how the expected beneficiaries are (High Representative of the Union for Foreign Affairs and Security Policy, 2021). Of the five flagships, two might be considered to especially benefit poorer households – the improvement of energy efficiency in residential buildings and the modernization of school infrastructure – but likely not to the extent of any of the revenue recycle schemes discussed in chapter 5.1.3.

The instruments under the Association Agreement mostly continue this approach, except the "Moldova Support Platform", which includes a €50 million targeted budgetary assistance earmarked to support "those most vulnerable" to the increase in energy prices, see description above.

So, the financial support does appear to directly support the poorest households. But the financial support to the government combined with the various other capacity-building measures could still enable the government to provide better support to its poorest citizens. Chapter 5.1.3 highlights that a more progressive spending of social support is dependent on the administrative capacity of the government, the level of formal employment and the level of social payment. The external EU policies do seem to have a limited but positive effect on those factors.

Between 2014 and 2020, the number of people contributing to social security schemes has increased, and subsequently the size of the social payments has increased as well (Akhvlediani et al., 2022). But while it is likely, the analysis of their correlation could not definitively attest that the EU external policies have significantly contributed to this rise. One definitive contributor is the improved tax system, which is at least partially induced by the support of the EU, and led to an improved capacity to collect taxes and customs duties (Akhvlediani et al., 2022). This increase capability to collect taxes was complimented by an increased capability to deliver social services (Landell Mills, 2021).

In **summary**, the central documents of the external EU policies do explicitly state their intention to decrease inequality, but this focus is not replicated in the details of the instruments implementing these policies. They focus rather on institutional change and economic support more general.
Analyzing the instruments through the lens of the model established in chapter five indicates that the effect likely skews progressive, but only slightly so.

Analysis rule of law

The analysis of the impact on Rule of Law is in this regard easier, since it is not only explicitly presented in the documents describing the aims of the policy but are also more present in the instruments.
The NDICI priority areas and the corresponding EaP policy objectives include the goal of "accountable institutions, rule of law, and security", and nearly €40 million is allocated to this goal for the years 2021 – 2024, see description above.
The macro-financial assistance is predicated on certain structural reforms, a majority of which target different aspects of Rule of Law, good governance, or the fight against corruption (European Commission, 2022a).
The Economic and Investment Plan does not include specific requirements in the field of Rule of Law.
The programs EU4Climate, EU4Environment, EU4Energy, and EU4Business do not refer specifically to Rule of Law either, but they do include capacity building measures and aim at institutional support.
The Association Agreement refers to Rule of Law in Article 12, and it gets repeatedly mentioned in the communications surrounding the implementation of the Association Agreement (see e.g. Council of the EU, 2023). The Economic Recovery Plan in particular explicitly refers to reforms in the area of Rule of Law as conditions to financial support (European Commission, 2021a).

Despite the strong presence in the documents, the actual effect still appears to be somewhat limited.
Within the last years, some improvements have been achieved, especially in the form of legislative reforms such as the 2021 "Strategy on Ensuring Independence and Integrity of the Justice Sector for the years 2022 - 2025", the national development strategy "European Moldova 2030", and various reforms in the justice sector and in the anti-corruption strategy (Ermurachi et al., 2022; High Representative of the Union for Foreign Affairs and Security Policy, 2023). These recent developments might lead to a stronger detectable effect in the near future, but the previous instruments have shown only limited success.
Regarding the developments from 2009 until 2019, an analysis of EU performance concludes that "little impact has been (…) recorded in upholding the rule of law, democratic standards, persistent corruption and politicization of the state institutions. In fact, progress was limited to those areas and sectors of the EU–Moldova AA conditioned by the budget support and macro-financial assistance from the EU" (Moga et al., 2022).
This assessment is mirrored in the evaluation of the Association Agreement up to 2020, which summarizes that

"Moldova's progress in the area of democratic governance and the rule of law has been uneven and slow" and that the "conditionality criteria for budget support and macro-financial assistance has been instrumental" to the progress that has been made (Landell Mills, 2021).

This slow progress in the area of Rule of Law also ties back to the slow progress in the area of wealth distribution. All of the reports and analyses cited stress that one of the most important barriers to reaching the goals presented, whether in the area of economic or social improvement, is the lack in administrative and institutional capabilities.

The final policy-area through which the EU external Just Transition regime could affect the wealth distribution in Moldova is the EU approximation.

7.2.3 EU Approximation

It seems somewhat counterintuitive to classify the approximation of EU acquis as some sort of policy. It will nevertheless be included in this chapter on the Just Transition regime, since it does fit the framework established in sun-chapter 7.1, and since the overall aim is to analyze the effect of the EU on Moldova, and the acquis approximation is a central aspect of their relations. For the same reason, "Acquis" will be somewhat extended to include both the classic transfer of EU legislation into national legislation as well as the accession of Moldova to EU programs mostly intended for EU MSs. Both have the potential to markedly affect the socio-economic development within Moldova.

Description

The foundation of **EU legislation** to be transcribed by Moldova is codified in the Association Agreement. This scope got widened through the recent application for EU membership and granting of candidate status.

The Association Agreement provides in its Annexes an exhaustive list of the legislation to be approximated either in full or in parts. In 2022, Moldova has already adopted around 29 700 European standards (Ermurachi et al., 2022). But only a fraction is relevant to the area of Just Transition.

Annex XI lists the acquis for the chapter on environment. It lists 25 legislative acts in the areas of: environmental governance, air quality, water quality and resource management, waste and resource management, industrial pollution and industrial hazard, and chemicals (Association Agreement EU-MD, 2014 Annex XI). Annex XII lists the acquis for the chapter on climate action. It lists four legislative acts all in the area of climate change and protection of the ozone layer (Association Agreement EU-MD, 2014 Annex XII). Annex VIII lists the acquis for the chapter on energy cooperation. It lists 43 legislative acts in the areas of: electricity, gas, oil, infrastructure, prospection and exploration of hydrocarbons, energy efficiency, and renewable energy (Association Agreement EU-MD, 2014 Annex VIII). Regarding the wider objective of Just Transition, Annex III lists the acquis for the chapter on employment, social policy, and equal opportunity. It lists 39 legislative acts in the areas of labor law, anti-discrimination and gender equality, and Health and Safety at Work (Association Agreement EU-MD, 2014 Annex III).

The progress on the implementation is regularly presented in the Association Implementation Report. The latest was published in February 2023. It comments very little on the developments in the area of climate protection, it focuses on developments in the justice reforms, fighting poverty, and improving the business environment (High Representative of the Union for Foreign Affairs and Security Policy, 2023). The report appears overall satisfied with the developments, it commends "strong commitments" and some key progress, while emphasizing the need for further developments and the restricting effect of both the current crises and of the "lack of institutional capacity and human resources in public administration" (High Representative of the Union for Foreign Affairs and Security Policy, 2023).

Commission Recommendations:
01. Justice System Reform 02. Address concerns of OSCE and Venice Commission 03. Fight corruption 04. "de-oligarchisation" 05. Fight organized crime 06. Improve public administration 07. Improve public financial management 08. Increase civil society involvement 09. Strengthen Human Rights

Tbl. 26. COM Recommendations

The Association Agreement already covers a substantial part of the EU legislation to be approximated, but an accession to the EU requires further alignment. The Commission opinion on the candidacy status assesses the mirrors the emphasis of the Implementation Report. It mentions the need to adopt EU climate acquis, but climate is in no way a priority. The opinion closes with nine recommendations which Moldova must fulfill to progress in its membership ambition. None of the recommendations refers to climate objectives, for a list see table 26 (COM(2022) 406, 2022).

Assessment Acquis Cluster Green Agenda	
Transport	Some level
Energy	Some level
Trans-European Network	Some level
Environment and climate change	Early stage

Tbl. 27. Preparedness Climate Acquis

The subsequent Analytical Report provides more details. Published in February 2023, it assesses the preparedness of MD to approximate the respective acquis in each of the chapters. In the cluster on cluster "green agenda and sustainable connectivity", three of the four chapters are assessed to show "some level of preparedness"[28]. The final chapter, the one on "environment and climate change" is judged to show "early stage of preparedness" (DG NEAR, 2023a). See table 27 for the details.

The Analytical Report provides a detailed presentation of the status quo (of February 2023). The above described EU4Climate program developed an action plan on how to improve upon this situation, with a roadmap "for Moldova's Alignment with EU Climate Acquis". It recommends eight actions, listed in table 28.

Overall, it prioritizes progress in the energy sector, and centers the need for a Moldovan Climate Change Law, as well as the harmonization with the EU ETS system and the EU F-gases Regulation (EU4Climate, 2022). Similar to the conclusion of the Commission's opinion, EU4Climate finds the main barriers to faster progress in lacking institutional, technical, and financial capabilities.

28 The Categories are "early stage of preparation", "some level of preparation", "moderately prepared", "good level of preparation", or "well advanced". Of the 33 chapters assessed, 12 are deemed to be in "early stage of preparation", 17 show "some level of preparation", 3 are "moderately prepared", and none show either "good level of preparation" or are "well advanced". One is not assessed.

Next to the transposition of law, Moldova also integrates closer to the EU legal framework through joining **EU programs.** In the context of both climate protection and of socio-economic developments, the most notable programs are the Fiscalis Program, the Customs Program, the EU Life Program, Horizon Europe,the Connecting Europe Facility, and the connection to the EU electricity grid.

Action Plan EU4Climate
01. Develop and adopt Climate Change law and policy documents
02. Strengthen MRV System
03. Develop and adopt the legal framework for the ETS
04. Develop and adopt F-gases policy and legal framework
05. Develop legal framework on ozone depleting substances
06. Amend legal framework on Renewable Energy
07. Amend legal framework on Energy Efficiency and Energy perfomance of buildings
08. Enhancing environmental governance

Tbl. 28. Action Plan EU4Climate

The Fiscalis Programme supports national tax authorities and their cooperation in order to combat tax fraud, tax evasion, and aggressive tax planning. Moldova joined in early 2023. The program aims at supporting the general EU objectives, among which climate protection and the Fit for 55 instruments, through actions in three main fields: General Collaborative Actions including expert teams, European Electronic Systems, and Human Competency Building. In 2022, the program had expenses of about €37 million (European Commission, 2023b). Since Moldova has only joined recently, there is no specific data of their benefit as of yet.

The Customs Programme is similarly set up. It supports national customs authorities and their cooperation in order to prevent unfair and illegal trade while supporting legitimate business (DG TAXUD, 2023). Moldova joined in early 2023. The Program aims at supporting the general EU objectives, among which green transition, especially through the setup and operation of IT and electronic systems. In 2022, it had expenses of about €140 million (European Commission, 2023a).

The EU Life Programme is the EU funding instrument for environment and climate projects. It is divided into four sub-programs: Nature and biodiversity, Circular economy and quality of life, Climate change mitigation and adaptation, and Clean energy transition (CINEA, 2023). Moldova joined in November 2022, and Moldovan projects can apply as soon as Moldova has ratified the respective association agreement (DG ENV, 2022). Horizon Europe is a funding program as well, but for research and innovation projects, with climate change and sustainable development as one of its prime declared targets. It covers the period from 2021 - 2027 (DG RTD, 2023b). Moldova is not a full member, but an associated country, and so far 87 Moldovan organizations were involved in Horizon Europe projects, receiving a total of about €7,4 million in net EU contributions (DG RTD, 2023a).

The Connecting Europe Facility (CEF) is a funding program targeting trans-European infrastructure investment, again citing sustainability as one of their objectives to be considered throughout. It is divided into three sectors: Transport, Energy, and Digital (European Commission, n.d.-b). Moldova associated to the CEF in May 2023, making Moldovan projects in the respective sectors eligible to apply for funding (DG NEAR, 2023b).

The CEF Transport is connected to the Trans-European Transport Network (TEN-T), which in December 2021 significantly increased its emphasis on green transportation. These recent amendments aim at four improvements: greening the existing transportation, increasing the efficiency and convenience of transportation, increasing the resilience of the respective infrastructure to damage from climate change, and improving the TEN-T governance (2021/0420(COD), 2021). This network is primarily intended for inter-EU connection, but in response to the invasion of Ukraine, the Commission proposed an additional amendment which aims to improve the connection to both Ukraine and Moldova, extending four European Transportation Corridors to the region and addressing the different rail track gauge (2022/0420(COD), 2022). For Moldova, this should lead to both improvement of the current transportation infrastructure as well as potential new infrastructure, though only regarding those lines connecting Moldova to the EU.

The CEF Energy is similarly emphasizing the sustainability objectives and presenting itself as a central instrument for delivering the EGD objectives. Its core actions lie in improving the interoperability of energy networks, integrating the internal energy market, and on cross-border renewable energy projects (European Commission, n.d.-b). Moldova had even before it joined the CEF access to some funding through CEF Energy, but now the access is expected to further improve, and includes support for cross-border projects in the field of renewable energy (DG NEAR, 2023b).
Even before joining the CEF Energy, in March 2022, Moldova also joined the Continental European Electricity grid, together with Ukraine (European Commission, 2022b).

The following figure 13 depicts the developments under the EU approximation.

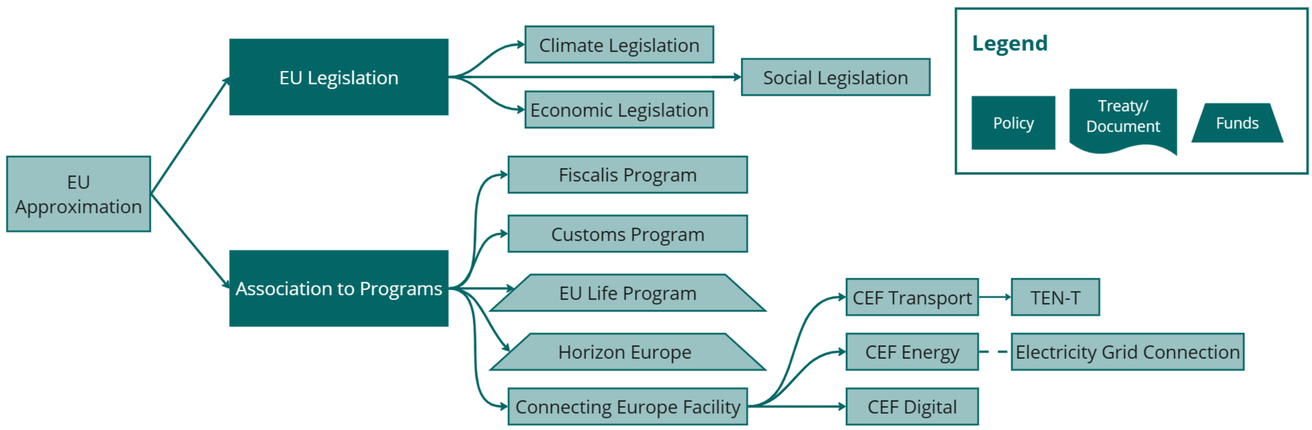

Fig. 13. Regime of the relevant developments under the EU approximation, by author

Analysis wealth distribution

The approximation to the EU concerns mainly legislative and institutional adaptations which mostly do not directly impact the markers of wealth distribution discussed, they rather impact the Rule of Law. It also contains only limited financial support, making the revenue recycle channel obsolete.

Regarding the **consumption channel**, the central policy characteristics are the type of goods affected and the level of change in price. The acquis approximation concerns adopting legislative acts which by nature usually do not directly affect prices of goods. The documents presented above confirm this, neither the annex of the Association Agreement not the analytical report of the Commission following the acquisition of candidacy-status mention legislation that would directly impact prices of consumer goods (Association Agreement EU-MD, 2014; European Commission, 2023a). The Association Agreement does contain provisions on consumer and health protection (listed in annex IV), and Moldova appears overall to have "some level of preparedness"[29] to adopt all the acquis in this area (DG NEAR, 2023a; Holovko-Havrysheva, 2021)

The approximation to EU programs has mixed potential to affect consumer prices. Most are again primarily concerned with institutional and legislative developments and not consumer prices.

The EU4Climate program does propose Moldova to adopt the EU ETS, which would likely have an overall regressive effect, as detailed in chapter 5.2, but so far Moldova has not indicated that it would like to do that in the near future.

Most of the climate-specific programs, especially the EU Life Program, focus on measures such as nature and biodiversity protection and general fight against climate change, which could, depending on its precise design have either a progressive or regressive short-term effect.

The Connecting Europe Facility does have potential for a slight progressive effect, especially through the CEF Transport and the CEF Energy. Both an improvement in transportation infrastructure and of energy infrastructure can decrease the prices of a wide array of goods, see the analyses above. Again, regarding the energy policies, this is a bit of a particular situation, that the instruments described above aim to both pursue climate objectives and to decrease the price of energy. "Typical" climate policies would aim to increase the price of energy.

Regarding the **income channel**, the central policy characteristics are the sectors affected and the aspects of the production targeted by the policy. Like the consumption channel, these characteristics are generally not directly targeted by the acquis approximation. From 2010 to 2020 the real minimum wage, the real average wage, and the minimum pension increased, but no causal connection to EU policies could be determined (COM(2022) 406, 2022; High Representative of the Union for Foreign Affairs and Security Policy, 2023). Annex III to the Association Agreement lists a substantial number of legislations in the area of labor law, anti-discrimination, safety at work, but no relevant reference to minimum wage. The question of social security support, social assistance or other forms of monetary support gets mentioned in the Association Agreement itself, see the analysis of the sub-chapter on external policy, but this perspective is not translated to the list of legislation in the annexes. The analytical report of the Commission following the acquisition of candidacy-status does not substantially refer to questions of income or wage either.

The approximation to the programs does not provide a significantly more substantial expected impact on the income in Moldova. The Fiscalis and Custom program could potentially have progressive effects, since they target tax fraud, tax evasion, and illegal trade, which can be assumed to be done by already more affluent persons and organizations. But this is not confirmed, Moldova joined both programs this year, an actual assessment of their

29 The Categories are "early stage of preparation", "some level of preparation", "moderately prepared", "good level of preparation", or "well advanced".

effects is therefore not yet possible.

In summary, the approximation to the EU legislation and programs does not show a detectable impact on the wealth distribution in Moldova.

Analysis Rule of Law

Contrary to its impact on the wealth distribution, the accession to the EU is intricately linked to the area of Rule of Law, at least de-jure.

The Association Agreement refers repeatedly to Rule of Law as one of the central pillars of the EU and of its relation to third parties. But similar to its approach to social policy, this focus is not substantially translated to the list of legislation which Moldova must approximate. And as the analysis of the Rule of Law effect of the external policies above shows, this corresponds with a rather limited effect observed so far in this area.

This could change with the increased scope of legislation prescribed by the recent attainment of the candidacy procedure. In the Commission's recommendations, which Moldova must adhere to, to advance in the candidacy process, the area of Rule of Law is front and center. In its assessment of the current state of Rule of Law and the necessary improvements, the Commission highlights reforms to the judicial system, fight against corruption, and the fight against organized crime, all three of which need significant "further improvement" (COM(2022) 406, 2022).

The EU programs do not appear to specifically target improvements of the Rule of Law (which would also be somewhat inappropriate), but they do put a strong emphasis on capacity building and the implementation of specific legislations.

So even though the past legislative approximations have not shown a significant improvement of the state of Rule of Law (Akhvlediani et al., 2022; Landell Mills, 2021), the more recent developments show promising potential to have a more meaningful effect in the next years.

7.3 Results

This chapter analyzes the both the fourth sub-question and the final research question. The fourth sub-question asks:

SQ4: What is the external Just Transition Regime of the EU towards Moldova?

Within the definition presented in chapter 7.1, this chapter finds that the external Just Transition regime is a complex net of policies, instruments, and funds which each could impact the Moldovan wealth distribution by affecting the consumers, the companies, or the government of Moldova. The following figure 14 summarizes the policies described. The figure is a simplification of a highly interconnected and detailed regime, highlighting the central policies and their central instruments. A similar depiction does not indicate an equal importance, nor does the absence of a depicted relation mean that the instruments have no connection what so ever.

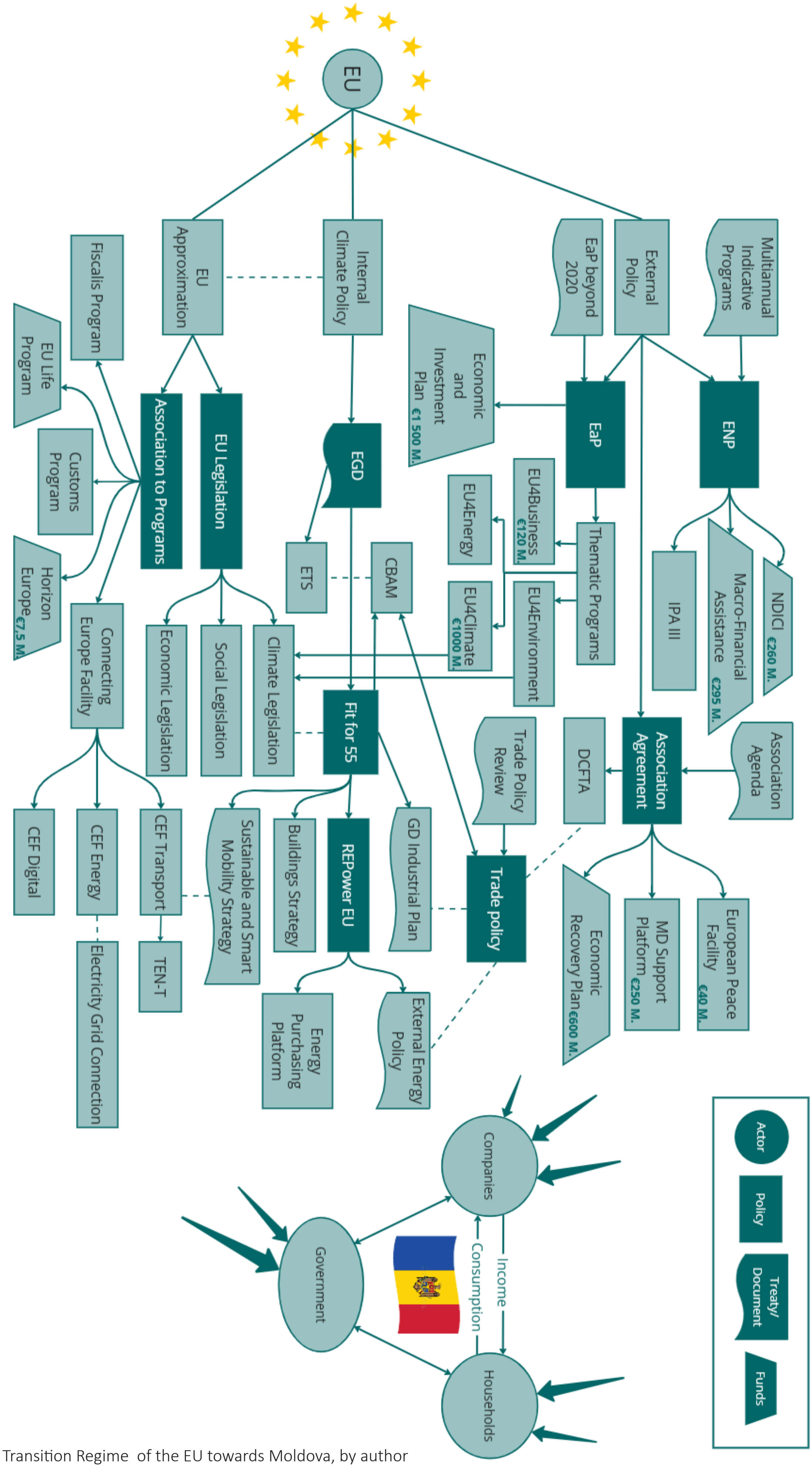

Fig. 14. Just Transition Regime of the EU towards Moldova, by author

Building on this definition of "external EU Just Transition regime", the final research question asks:

RQ: How does the external EU Just Transition regime impact the wealth distribution in Moldova?

It finds that:

The external EU Just Transition regime has a slightly progressive impact on Moldova.

The impact of the internal policies with external effects appears to be progressive but only very slightly.
Looking at the consumption channel, the current EU approach could lead to a decrease in energy prices in Moldova, which would have a progressive effect. It must be stressed though that this is a rather unusual and probably only temporary approach, following the Russian invasion of Ukraine which led to some instruments which aim at making energy cheaper, such as the energy platform where Moldova is included.
Additionally, this effect compares the price of energy in Moldova in the near future to the price of energy in a hypothetical different near future and not to the price pre-crisis, so the lived experience of Moldovans might still be an increase in inequality.
Looking at the income channel, the effect of CBAM on Moldovan exports suggest a slight progressive effect as well, unfortunately through a decrease in wages of the better-earning workers.
The revenue recycle channel is not applicable on the internal climate policies and they do not appear to impact the Rule of Law situation in Moldova.

The impact of the external policies with climate objectives appears to be stronger, but more mixed in its direction.
Looking at the consumption channel, the effect appears to be rather in the quality of the goods, not their price. The DCFTA seems to have the strongest impact, which also makes intuitive sense, and it appears to have had positive impact especially on the access to clean water and on the energy efficiency of buildings, both of which would benefit poorer households more, making it progressive. Similar to the impact of the internal policies, the external also at least declare their aim to affect a decrease in energy prices.
Looking at the income channel, the external policies show a strong potential to impact the Moldovan impact, but at the current state of research on the topic it is difficult to say which impact they have. If the support to SMEs and to a more productive production process leads to higher wages, then the impact on overall income would be positive, but at this stage no claim on their effect on the wealth distribution can be made.
Looking at the revenue recycle channel, the effect of external policies is again likely progressive, but not overly so. The financial support is partly earmarked for poorer households, and the size of social spending has increased, but the reports and analyses at hand are not conclusive enough to indicate causality.

The impact of the EU approximation process on wealth distribution is not detectable, but it does have a strong potential to indirectly, in the longer to medium term affect both the prices of consumer goods and the incomes in Moldova. Of the currently detectable effects, the legislation appears to have a slight positive effect on the quality of both consumer goods and of work conditions.

The impact of all three categories of policies on the Rule of Law in Moldova is very minimal, but positive. Despite being a heavy focus of the founding documents, only very limited success in improving the situation could be detected. This could change however with the recent developments in the candidacy status, which gives the EU new tools and competencies to influence and motivate Moldova to improvements in this area.

This last chapter first summarizes the results of this thesis, the answers to all four sub-questions and the answer to the overarching research questions. It then provides a broader interpretation of the findings in the light of the wider context. Next, it reflects on the limitations of the research and the corresponding possible future research. Lastly, it provides a few policy recommendations to the future development of the EU- Moldovan relations.

8. Discussion

Summary Results

This thesis is an exploration of the crossover of two comparatively new and emerging aims of the EU. On one hand the, increasing consciousness of the importance of an holistic look on the interconnections of climate goals, economic development, and social considerations – Just Transition. And on the other hand, the increasing ambition of the EU to be an active global player, to advance its interests and to support its values also outside its borders.

To this end, this thesis asked the research question:

RQ: How does the external EU Just Transition regime impact the wealth distribution in Moldova?

This question contains a number on not yet definitively defined concepts and mechanisms which require further delineation to enable the research question to be answered within the scope of a Master thesis. To this end, the thesis first answers four sub-questions.

The **first sub-question** explores the term "Just Transition" and asks:

SQ1: What socio-economic aspects of Just Transition does the EU target with their external policy?

It finds that the EU external policy especially targets the aspects of employment, poverty, social cohesion, and Rule of Law. With this it is mostly in line with the internationally dominant understanding of Just Transition, centered around the definition of the ILO. The most appropriate single indicator for the first three is the wealth distribution within the respective economy. Rule of Law is therefore separately included in the subsequent discussions.

The **second sub-question** explores the term "impact on wealth distribution" and asks:

SQ2: How can climate policies impact the distribution of wealth within an economy?

It finds that climate policies can impact the distribution of wealth through their effect on the households´ spending, income, and at times through government spending. More specifically, they can affect the price of goods, the production process, and the effect on government expenditure. These three impact pathways are each influenced by characteristics of the policy analyzed and by characteristics of the national economy in which the policy is implemented. Additionally, contextual factors impact all three impact pathways.

The final effect of a policy can be approximated by determining the policy characteristics of the respective policy and the national characteristics of the economy in which the policy is enacted.

The following figure 15 summarizes the channels and characteristics.

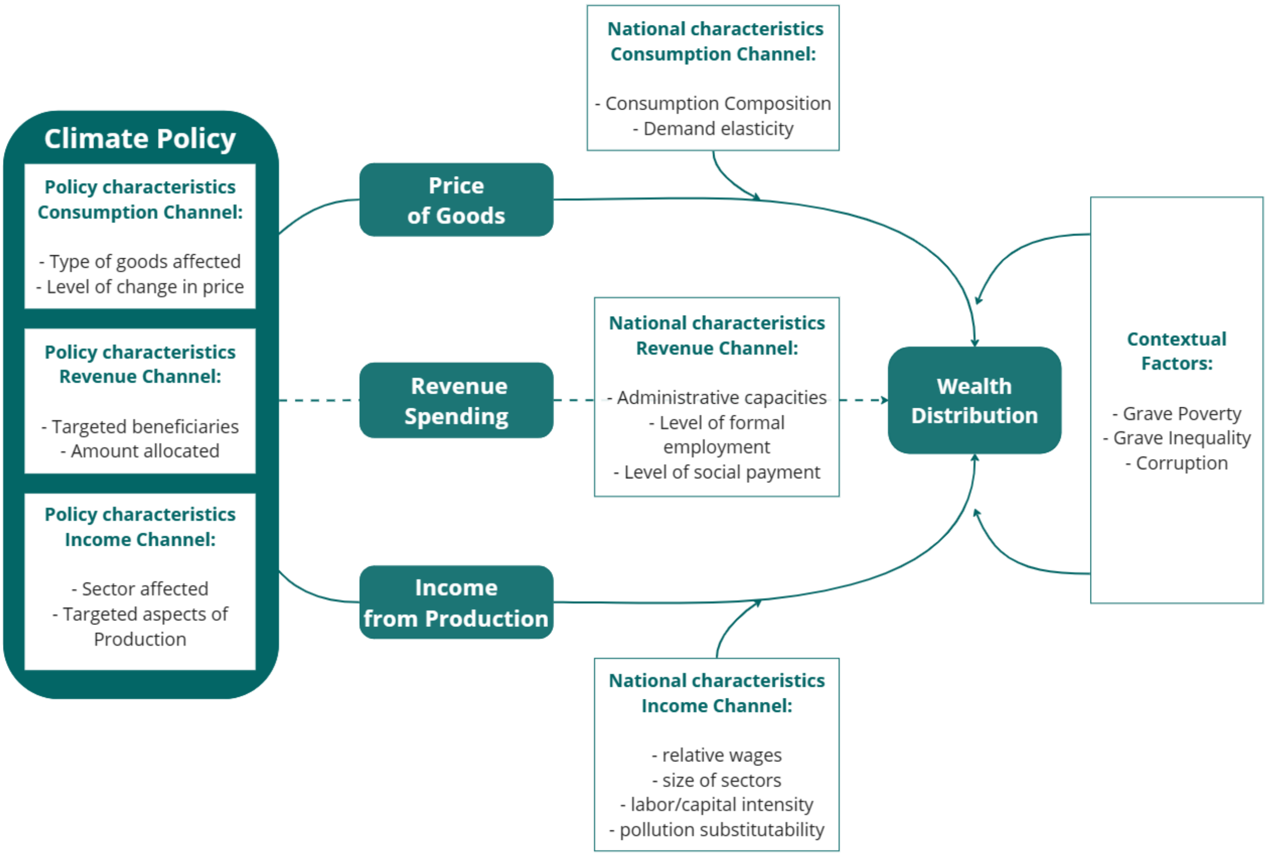

Fig. 15. Theoretical Framework - Impact Pathways with Channel Characteristics, by author

The **third sub-question** provides an analysis of Moldova in the light of the national characteristics presented in the previous chapter and asks:

SQ3: How do the relevant socio-economic characteristics manifest in Moldova?

The findings are summarized in the following table 29:

Area	Channel	Characteristics	Manifestation
Wealth Distribution	Contextual Factors	Poverty	Severe
		Corruption	Moderate High
		Inequality	Similar to EU
	Consumption Channel	Consumtion Composition	Q1 spends overproportionally on: Food, housing inc. heating. Q1 spends under proportionally on: transportation, electricity, rent.
	Income Channel	Employment	41%
		Source of Income	Q1: main: Employment, Pensions
		Sectors of Employment	Overall most relevant: agriculture, trade, manufacturing
	Revenue Channel	Informal work	High
		Social Payment	High
Rule of Law			Weak

Tbl. 29. Summary Results Chapter 6

The **fourth sub-question** explores the term "Just Transition regime" and asks:

SQ4: What is the external Just Transition Regime of the EU towards Moldova?

It finds a substantial number of EU policies and instruments which fall under the defined scope of Just Transition Regime. This chapter categorizes the policies into internal climate policies with external effect, external policies with climate objectives, and the developments under the EU approximations. For a complete list see figure 14 in the previous chapter.

These explorations provide the tools and delineations to answer the final **research question**:

RQ: How does the external EU Just Transition regime impact the wealth distribution in Moldova?

It finds that the external EU Just Transition regime has a progressive impact on Moldova, but only slightly. Despite the explicit commitment to the advancement of equality in the various documents founding the central policies, the observable effects remain very limited.

The various policies impact both the prices of consumer goods and the income of citizens in various interlinked ways and seem mostly more accidental than indicators of a deliberate attempt to benefit the poorer households more than the richer.

The effect on the Rule of Law is similarly weak, but with a potential to increase in the near future.

Reflection

The thesis intentionally takes a multifaceted and interdisciplinary approach to a very broad topic - external Just Transition. This necessitates to first delineate multiple concepts – Just Transition, external Just Transition, external Just Transition regime, and impact on wealth distribution – before the actual research question can be answered.

This approach has the advantage of providing insights into a host of different concepts, most of which are rather new but increasingly more prominent in the respective literature. It also provides the possibility to utilize different research methods, combining insights and approaches from different disciplines. Finally, this allows to answer a question which would otherwise be too broad to analyze.

On the flipside, this approach has the disadvantages that it makes the final answer to the research question less applicable to a wider generalization. Precisely because the final analysis is built on a host of different previous analyses. These previous analyses can naturally be questioned and critiqued, and if another researcher is not convinced by my argumentations and my conclusions, the whole base for the final analysis is in question.

The approaches of the four sub-chapters also show different advantages and disadvantages. These are discussed above, in chapter two, together with the thesis' scientific and societal relevances.

The analysis of the **first sub-question**, on the targets of the external EU policy takes a decidedly legal approach to the question, deriving the targets of the EU solely from their legal base. This approach has the advantage that, if done well, it provides a rather solid argument for the de-jure responsibilities, especially for a political system like the EU that is so heavily based on their legal competencies.

But on the other hand, such an approach does not enable the inclusion of more political concerns. The conclusion of chapter 4.3, that wealth distribution is the most appropriate indicator, does make economic and social sense, but "distribution" is a very politically sensitive word, and there is a reason that the EU rather talks about "supporting the poor" and excludes the effect on the wealthy from the debate.

Reflecting on the process of researching this part, I was surprised to find so little specification of "Just Transition", despite its prominence in many texts, and I was surprised to find so few decidedly social or poverty-related articles in the EU legal framework.

The analysis of the **second sub-question**, on the theory behind a policies impact on wealth distribution, is based very heavily on one literature, Shang (2023). This is due to the rather unexpected lack of similar papers which would provide a similar theoretical model of analysis. While being heavily substantiated by insights from other literature, this framework is, like any theory, not the only possible option, and a different theoretic base could also be argued for and would provide a slightly different final result.

The **third sub-question**, on the manifestation of the characteristics in Moldova, flows rather naturally from the previous sub-question. Therefore, if the answer to the previous is generally accepted, the results to this question should not be too controversial.

Reflecting on the process of researching this part, I was rather lucky that the Moldovan Bureau of Statistic provides such a comprehensive and detailed dataset, even in English! I did not know that beforehand, and without it I would have seriously struggled to find the respective data.

The approach to the **fourth sub-question**, on the external Just Transition regime, again has a few advantages and disadvantages. The main advantage is the claim to provide a conclusive and definitive list of policies. The policies of the EU are infamously complex, interconnected, and interdependent. An exhaustive and analyzable list of these policies requires a strong limitation based on goals, actors, and forms. It also requires a categorization which brings a hierarchy, definitive relations, and clear separations of instruments, policies, and tools. This categorization has the advantage of being analyzable. It has the disadvantage that this simplification can hide interconnections, or it can make connections seem more important than they actually are.

Reflecting on the process of researching this regime, I was surprised by both the vast amount of details and the lack of general information provided by the EU on their policies. If you know what policy you are looking for, you can mostly find close to all the respective information. But the information lacks in term of contextualizing the policies, elaborating on their relation and their order.

Interpretation

Accepting all these choices made regarding the approach to the thesis as a whole and to the different sub-chapters, several interpretations of the results can be made.

The **first sub-question** finds that the central targets of the EU external policy are the increase in the level of employment, the reduction of poverty, the strengthening of social cohesion, and the strengthening of Rule of Law. As stated above, this perception somewhat excludes the political dimension. But this gap between the legal responsibilities and the political feasibility also means that the EU actions do not fully fulfill its legal responsibilities. While all these central targets seem to be generally accepted as good and valuable by both actors within the EU as well as the EU public, I would find it very surprising if they would perceive them as any sort of *responsibility*. If the EU wants to continue their quest of becoming a geopolitical actor and increase their influence over other countries, then this existence of a social dimension of their legal base should give them pause to consider if with this increased power might also come with increased responsibility.

The **second result** can be interpreted in a similar vain. It highlights the importance of both prices of consumer goods and of the source of income for the wealth distribution. Even if the EU does not want to go so far as to openly strive for a more equal distribution of wealth and remains at striving for an alleviation of poverty, this dual approach holds up. But looking at the policies at place which aim to alleviate poverty, we find mainly policies impacting the price of goods, and maybe some concerned with employment, with a potential total loss of jobs. The *height* of income is not usually part of the discussion.

But this critique might be more applicable regarding the EU policies in their own territory. Asking the EU to include these considerations in their *external* policies is likely unrealistic. On one hand it would be unfeasible, it is difficult enough to estimate these effects in your own economy and design the policies accordingly. On the other hand, the EU might simply not have the competencies to implement such policies in third countries. Additionally, that might be politically and diplomatically difficult, if the government and elites of the third country do not wish a more progressive effect.

The **third result,** the socio-economic situation in Moldova, really shows that the main characteristic of the country in the context of this research is the severe poverty of its people. The chapter compares Q1 to Q5, the "rich" include therefore a substantial 20%. The situation might look different if looking at the top 1% or even 10%. But even with this caveat, the living situation of even the richest fifth of the citizens is profoundly not-wealthy. As repeatedly stressed throughout the text, normatively, this also means that the reader should keep this in mind when reading that an effect is either progressive or regressive. While the focus on wealth distribution rather than on poverty reduction makes sense for all the normative and analytical reasons presented in chapter 4.3, in the case of Moldova the old neoliberal view might actually be somewhat applicable, that the primary objective of a socio-economic policy would have to be to make the general cake bigger, before worrying about its distribution. But only to a reasonable limit of course.

The central interpretation of the **fourth result**, the policy regime, is that the current regime has strong potential for improvement. Especially in the current dynamic times with the ongoing commitment of Moldova to implement substantial reforms. But it also shows that most of the promising instruments are connected to the candidacy procedure. This is not viable for all the countries the EU has relations with. If it wants to exert more influence on the socio-economic situation in other countries, it would need to improve some of the more universally applicable instruments.

It also shows the limitations of the wealth-distribution focused approach to external policy, which is further discussed below.

Limitations and further research

There are a number of limitations to both the thesis itself and the potential to generalize the results of the thesis to a wider context. These limitations also provide interesting areas for further research.

The limitations of the individual approaches to the sub-questions are mostly discussed above in the reflection. While each and every one of them contains enough specific limitations to write a second thesis about, for the sake of brevity I will focus on the limitations of the research question to fully explore the central aim of the thesis: external Just Transition.

As a case study, the thesis gives only insights into the impact on one country. But as both the discussion and the analysis of the established, the effect of the EU policies, and thereby the effect of a Just Transition regime, is highly specific to the respective country.

Moldova has been selected because it has particularly close connections to the EU. Excluding the new developments under the candidacy procedure, the policies in place should therefore be somewhat generalizable. The EU might have (significantly) fewer policies with other countries, but the ones that they share with Moldova should be comparable, and there should be only a limited number of instruments that the EU is implementing in other countries but not Moldova.

A deeper look into the policies further highlights that the most influential policies do all seem to be connected to the general EU trade policy, except the micro-financial assistance. The approximation to the EU has the potential to impact the Rule of Law, but barely to impact the socio-economic situation. While a stable Rule of Law situation is central to the wealth distribution in the medium to long term, in the short term this means that the EU approximation does not have a meaningful impact on external wealth distribution.

Additionally, the instruments that showed the most significant impact on Moldovan wealth distribution were mostly very country specific or temporary. Notably the instruments responding to the energy crisis which aim to decrease the energy prices, the effect of the DCFTA, and the budgetary support. These instruments will not manifest in the same way in different countries.

It can therefore be assumed that while the approach of the thesis and the structure of the Just Transition regime could be generalized to different cases, the results of the research question could not. By my very preliminary assessment based on the research of the thesis I would assume that the EU in general can have significant impacts on the wealth distribution in third countries, based on the respective national characteristics, but the impact does not affect the wealth distribution generally in any particular direction.

This very preliminary assessment could be explored through further research.

This thesis explores different gaps in literature. Each of those areas offers a wide breadth of interesting opportunities for further research. See chapter two on the relevance of the paper for the specific gaps in literature of each chapter.

One area which would particularly benefit from further research is the economic and social impact analysis of climate policies. The rising interest in a more nuanced and holistic approach to economic development also leads to an increased demand in respective research, ideally not directly dependent on the EU. This would provide an excellent opportunity for more methodical explorations into the connections which are both backed by theory and supported by empiric evidence.

More specifically, this could include impact assessments of the collective cluster of implemented EU policies on different countries, or the generally expected impact of a specific type of policy on a specific marker of the economy, such as wealth distribution.

Based on the results of this thesis, another interesting further area of research could be the comparison of the current EU approximation process of Moldova with the previous process of Romania.

This thesis deliberately excluded individual Member States as actors from the analysis, but there is a close connection between Moldova and Romania, and some aspects of the economy and the society show clear parallels. Since Romania is now successfully an EU MS, its case could give interesting insights to Moldova.

Connected even closer to the research question and design of this thesis, another interesting exploration would be the impact of the Just Transition regime excluding the instruments implemented in reaction to the Russian invasion of Ukraine. As highlighted in chapter 7.3, the slight positive impact that could be observed is strongly supported by the efforts to decrease the price of energy. In the longer term, these efforts will diminish, which could change the direction of the impact.

Recommendations

Given these reflections, interpretations, and limitations, what policy recommendations can be extracted from the results of the thesis? As indicated by the relevance of chapter two, the insights from the thesis could be useful especially for the EU. The results lend themselves both to short- to medium term recommendations and to recommendations that concern the more fundamental, long-term development of the EU.

The short-term recommendations concern mainly the design of external policies targeting neighboring countries. The analyses of the described policies as well as the reports and research cited in chapter 7.2 indicate that the effectiveness of policies in the area of Just Transition could be increased if:

- The policies emphasize their intended social impact. This includes the emphasis in the legal document, but also the intentional effort to mainstream social considerations throughout the policies and instruments.
- The policies are based on clear conditionality. Especially for financial instruments, conditionality proved to be very effective. This must include clear, measurable targets which are well communicated. Especially in countries with a somewhat fragile Rule of Law, it would be advisable to have the targets be demonstrated progress rather than the adoption of legislation, since the legislation is not always reliably implemented.
- The policies are highly country specific. Even within the EaP, or within similar clusters like the Western Balkan countries, the situation within the countries differs markedly. The political and institutional setup implementing the policies differ; the economic characteristics, strengths, and weaknesses differ; and the needs, wants, and EU aspirations of the citizens differ. To be both effective and efficient, and to thereby also add to a favorable perception of the EU, policies must take these differences into account and be tailored explicitly to the situation within the country targeted.

The long-term recommendation concerns the EU as such. Much of the EU's impact on third countries is founded in the EU's own setup and its success to live up to its values and aspirations. Whether indirectly, as a normative role model, or directly, by third countries´ approximation of parts of EU law.

Given this strong orientation on the EU setup, it is not likely that the EU could advance a social or environmental development abroad that exceeds the development within the EU itself. Nor would it likely be perceived as fair if the EU would demand from others what it itself does not deliver.

In the context of this thesis, I argue that this means that the EU would be advised to seriously consider its own approach to wealth distribution. Despite the central role it plays in many of the targets which the EU is openly committed to, employment, poverty, and social cohesion especially, wealth distribution itself seems nearly taboo to mention, let alone to openly try to advance. It is politically a very sensitive topic, but, as elaborated on in detail in chapter 4.3, within the constrains that serious climate protection will place on economic growth, and with the strong regressive tendencies of both the burden of climate change itself as well as the burden of climate protection measure, this is a discussion that the EU as well as the individual Member States will have to have sooner or later. Without an active Just Transition approach that takes the distribution of burdens and contributions into consideration, we will be either able to succeed in protecting the climate, or succeed in protecting the most vulnerable, but not both. (We could of course also achieve neither).

And it might be tempting to pursue such goals in third countries, even if it's not feasible at home. The Association Agreement after all does explicitly call for equality. And the strong power the EU holds over countries like Moldova, which show to be willing to try to comply with nearly all conditions placed on them, means that it might even work to some degree. But the closer analysis of the regime in place shows that there is a clear limit of the effect the EU can have in areas which exceed their own ambitions.

To end this thesis on a somewhat dramatic note, the final recommendation to the EU could come in the form of a paraphrasing of the famous categorical imperative of Kant:

> *"Structure your economy only in such a manner, that you could also wish to be a universal law."*

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