



Master's Degree in Policies and Governance in Europe
Course of Comparative Public Policy in Europe

**THE LIMITS OF THE EU'S POWER OF INFLUENCE:
CHINA 6B AND THE CASE OF VEHICLE EMISSION STANDARDS**

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TABLE OF CONTENTS

I. INTRODUCTION	3
II. THE EU AND CHINA IN THE INTERNATIONAL REGULATORY ARENA	5
A. STANDARD-SETTING AS A TOOL OF INTERGOVERNMENTAL BARGAINING	5
B. THE EU AS A GLOBAL ENVIRONMENTAL REGULATOR	7
C. THE RISE OF CHINA AS AN INDEPENDENT REGULATOR IN THE AUTOMOTIVE SECTOR	9
D. UNDERSTANDING THE LIMITS OF THE EU REGULATORY POWER: A METHODOLOGICAL CONSIDERATION	12
III. BACK TO THE ORIGINS: THE 2008 AUTOMOTIVE CRISIS AND ITS IMPACT ON STANDARD-SETTING	13
A. CHINA 6B AS A DRIVER OF SUSTAINABLE DEVELOPMENT	13
B. VEHICLE EMISSION STANDARDS AS A KEY ELEMENT OF INDUSTRIAL POLICY: THE INFLUENCE OF XI JINPING'S THOUGHT	15
C. THE 2009 AUTOMOTIVE CRISIS AND THE CONSOLIDATION OF CHINESE AUTOMOTIVE INDUSTRY	17
D. FURTHER CONSIDERATIONS ON THE EVOLUTION OF THE EUROPEAN AUTOMOTIVE INDUSTRY	18
E. BUILDING A MIDDLE-RANGE THEORY ON THE ESTABLISHMENT OF CHINA 6B	20
IV. CONCLUSION	22
V. REFERENCES	24
VI. SUMMARY	30

I. Introduction

In an increasingly complex and interdependent world, the European Union (EU) has been progressively described as an international standard-setter (Newman and Posner, 2015). In the academic literature, conceptualising the EU as a global regulator has been possible thanks to the ongoing debate on the kind of international actor the EU is. More specifically, in response to the EU's atypical actorness in international relations, Sophie Meunier and Kalypso Nicolaidis (2006) contended that trade is key in making the Union a global power. The Single Market not only makes the EU a power in trade, being the most important economic area for the exchange of goods and services, but it also – and maybe most importantly – makes it a power through trade, meaning that the Union is able to influence third countries through the consolidated system of market access conditionalities present in trade agreements, and other policy instruments such as the European Neighbourhood Policy. Building on these arguments, Chad Damro (2012) contended the existence of a Market Power Europe (MPE). In Damro's opinion, the role of the EU as a global regulator is not just the consequence of conditionality clauses but stems more generally from the sheer size of the Single Market and the Union's regulatory capacity, i.e., the EU's consolidated expertise in the field of economic and social regulations. Indeed, the Single Market's size is such that it reduces the possibility for changes in standards and thus obliges foreign actors to conform with EU standards. Moreover, the complex establishment of the Single Market – which needed a high degree of harmonisation among Member States – led to intense regulatory activity, fostering the regulators' expertise in creating stringent standards. Hence, the MPE concept does not necessarily imply intentionality, but it can also be the unintentional outcome – the spill-over effect – of a purely domestic policy.

Environmental policy is undoubtedly a policy area that has been significantly studied by the scholarship on the EU's global regulatory power. By way of illustration, the EU's action in the global fight against climate change is particularly emblematic of the Union's unilateralism in attempting to define the rules of the international economy (Scott and Rajamani, 2012). Indeed, since the 1990s, the Union progressively developed the awareness that it could support the implementation of international agreements on climate change, chiefly the United Nations Framework Convention on Climate Change (UNFCCC), by extending its own (ambitious) environmental legislation to third countries' actors through its market power through a process of externalisation. The latter refers to the extension of the legal effects of domestic laws to (mainly) foreign actors and beyond national borders, when there is, at least, a minimal link to the country of reference. This strategy, therefore, allowed the European Union to perceive itself as a climate diplomacy international power and, in her first speech in the European Parliament Plenary, the President of the EU Commission Ursula von der Leyen reaffirmed the Union's intention to become a "global standard setter" in the green transition (von der Leyen, 2019).

However, a weakness seems to appear in the literature. In fact, no authors - neither Chad Damro himself nor the scholars who have used MPE to analyse the EU's action in some policy areas – have consistently engaged with the limits of the EU regulatory power in the international economy. The

scholarship seems to give only static pictures of such power in different sectors, among which environmental policy. It does not offer an evolutionary analysis of how Market Power Europe changes when the underlying conditions change, chiefly the centrality of the EU Market in the global economy. According to the aforementioned theories of the EU's power of influence, the centrality of the EU Market is essential to persuade non-EU actors that the non-respect of the Union's rule could have a significant impact on their business activities. Yet, it must be acknowledged that some interesting views are already present in the literature and need further study. For instance, Alasdair Young (2014) argued that Market Power Europe is a problematic concept as it overemphasises the unilateral nature of the regulatory externalisation process. In his opinion, whether the European Union will be able to act as a rule-maker in international standard-setting or not, will depend on the Union's ability to build alliances with third countries. Moreover, in conceptualising the so-called Brussels Effect, Anu Bradford (2020) introduced – besides market size and regulatory capacity - the notion of non-divisibility. To use Bradford's words: "Global standards emerge only when corporations voluntarily opt to extend the regulatory requirements of the most stringent regulator to their global operations" (ibid.: 53). Non-divisibility takes place when the costs of uniform production are lower than the ones of a production tailored to meet divergent regulatory standards. Thus, the industrial capacities of third countries seem to impact the success of the EU regulatory activism.

Accordingly, the current research aims to better understand the limits of the EU's power as a global regulator, chiefly by looking at what could happen to Market Power Europe when the Union loses its salience in an industry. Therefore, the focus will be on the case of vehicle exhaust emissions standards, a policy issue in which the EU historically played an important role in uploading its preferences to international fora such as the United Nations Economic Commission for Europe (Holzinger and Sommerer, 2014). Indeed, the consolidated regulatory capacity of the EU in this field has resulted in several countries – including China – adopting legislation similar to the Euro standards. For instance, until January 2021, the Chinese standard for vehicle emissions, the so-called China 5, was largely based on Euro 5, the European emission standard in place between 2011 and 2015 (He and Yang, 2017). Following the introduction of Euro 6, a reform of Chinese regulations was made in 2016 and upgraded China 5 to China 6 and China 6b. The latter – which entered into force in July 2023 - is considered to be even more stringent than the current European requirements (Howard and Zhu, 2019). Incidentally, such reform is taking place at a time in which China's automotive sector is overtaking European car manufacturers, chiefly in the electric vehicles segment. Moreover, Beijing is increasingly moving towards the implementation of the China Standards 2035 strategy, adopted in 2018, aiming at making the country a global technical standard-setter (Gargeyas, 2023). Hence, the current research will look specifically to the adoption of the China 6b standard, in order to answer the following research question: How has the loss of the EU's dominance in the automotive industry influenced China's deviation from Euro standards with the adoption of China 6b? Also, the response to this question will entail addressing two sub-questions: How is the green transition influencing power relations in international standard-setting? How is the automotive private sector significant in this shift of power?

The main findings of this research are that China's overtaking of the EU in the automotive industry has incentivised Beijing in making this sector a pillar industry for the country's development, thus pushing the central government to be more ambitious in standard setting. In this process, the fight against climate change has created a perfect window of opportunity for China's specialisation in the production of New Energy Vehicles (NEVs). Therefore, the deviation from Euro standards with the implementation of China 6b has been instrumental to consolidating the Chinese leadership in the NEV segment. Moreover, the responsiveness of Chinese private sector to the government's inputs has been pivotal in ensuring the smooth transition to new indigenous regulations. In this research theory-building process tracing is used to focus on the causal mechanism underpinning the adoption of China 6b. As highlighted by Beach and Pedersen, this methodology aims at building a "theoretical causal mechanism that is expected to be present across a population of cases" (Beach and Pedersen, 2014: 16). Hence, this type of process tracing not only would be helpful in answering the research question, but it would also enable this research to position itself in the broader literature on the EU as a global regulator, by providing some insights on the dynamics that could contribute to the end of Market Power Europe in some domains. The dissertation will therefore be structured as follows. In Part II, the theoretical framework of this research is set. To do so, international standard-setting will be first studied using the lens of intergovernmentalism, as applied to International Relations. This will make it possible to present how the EU has been conceptualised as a global environmental regulator. Here, the emphasis will be placed on the case of the Euro Standards and how they became an international benchmark. Then, China's rising automotive sector and its recent deviation from European norms will be discussed. At the end of Part II, some methodological considerations will be made, before proceeding with the process tracing. Part III will thus present the main findings of this research and illustrate the key elements of the causal mechanism linking the EU loss of salience in the automotive industry to the implementation of China 6b.

II. The EU and China in the international regulatory arena

a. Standard-setting as a tool of intergovernmental bargaining

The end of the Cold War, following the collapse of the Soviet Union in 1991, marked the demise of a bipolar structure of international relations and made possible greater interaction, economic and political, between the Western and ex-Soviet blocs. In this context, the world witnessed a momentum for new countries – chiefly ex-Soviet ones - to join international fora¹ promoting the establishment of global standards and regulatory frameworks inspired by neoliberalism (Zürn, 2018). This momentum represented, in the eyes of many, the beginning of a new era based on Western-driven global governance, which has been described by Michael Zürn as "the exercise of authority across national borders as well as consented norms and rules beyond the nation-state, both of them

¹ It must be noted that an initial wave of international standard-setting took place between the 1960s and the 1970s. For instance, in 1963, the Codex Alimentarius committee was established by the United Nations to ensure food security, while the International Convention for Safe Containers of 1972 made containers the global standard for international trade.

justified with reference to common goods or transnational problems” (ibid.: 4). Global governance through standard-setting became particularly fashionable as it seemed to give “solutions to a range of interaction problems, such as information asymmetries or compatibility problems, between various actors” (Meyer, 2014: 1). For instance, the establishment of the Financial Stability Forum in 1999 was meant to foster coordination among governments and central banks, to reduce national barriers for the financial sector, and thus benefit the architecture of a global financial system (Drezner, 2007).

However, international fora and standard-setting organisations became new arenas of power. Indeed, by setting the rules of the game, standards and regulations “have a direct impact on who has access to [- or holds power in] a given market” (Meyer, 2014: 2). They establish winners and losers that are determined by those who write the rules. Hence, instead of leading towards truly global governance, such conflict provoked a fragmentation of international relations as governments, when dissatisfied with the outcomes of multilateral standard-setting, tried to circumvent international regulations (Reiterer, 2016). To be more precise, governments expressed such fragmentation of international standard-setting architecture either by creating smaller clubs of like-minded States - the so-called minilaterals - or by acting unilaterally through the externalisation of domestic regulations, i.e., the extension of the legal effects of domestic laws to (mainly) foreign actors and beyond national borders, when there is, at least, a minimal link to the country of reference.

This fragmentation of international standard-setting can be analysed under the lens of intergovernmentalism, as applied to International Relations. As a matter of fact, both minilaterals and the externalisation of domestic regulations represent perfect examples of governance where States aim at shaping institutions according to their national interests. On the one hand, the development of minilaterals led to what the scholarship on global governance has labelled as a regime complex: “an array of partially overlapping and non-hierarchical institutions governing a particular issue-area” (Raustiala and Victor, 2004: 279). The latter implies the creation of “several legal agreements [within] distinct fora” on the same policy issues (ibid.). According to Karen Alter and Sophie Meunier (2009), international standard-setting venues are hence shaped and institutionalised by States, through forum-shopping. Indeed, the multitude of partially overlapping agreements and fora allows governments to select the standard-setting venue - and thus follow the standards - that best correspond to their national preferences. In doing so, the legitimisation of international fora and institutions by State actors is linked to the promotion of national interests.

On the other hand, the externalisation of domestic regulations as a tool of international standard-setting can also be studied from the perspective of intergovernmentalism. In analysing the EU's action as a global regulator, Chatzopoulou and Ansell emphasised the existence of a “dynamic interconnection [in which the internal and the external dimensions of EU policymaking] constrain and enable one another” (Chatzopoulou and Ansell, 2022: 276). In their view, when setting the geographic scope of EU standards beyond the Union's borders, EU policymakers are primarily fulfilling their role of domestic problem-solvers as the external dimension of their action is driven by

domestic interest groups' revendications. Such conceptualisation is compatible with Robert Putnam's two-level game theory, according to which "at the national level, domestic groups pursue their interests by pressuring the government to adopt favourable policies, [while] at the international level, national governments seek to maximize their own ability to satisfy domestic pressure" (Putnam, 1988: 434). As a matter of fact, the inclusion of externalisation provisions in EU regulations can be seen as a way for EU policymakers to shape the international context in order to make it comply with the expectations of domestic stakeholders, i.e., the national interest. For example, the European Commission's recent support for the creation of a Carbon Border Adjustment Mechanism (CBAM) is the result of pressure - from European industries affected by the EU Emission Trading System - to create a level playing field against carbon leakage (European Parliament, 2023).

In this research, intergovernmentalism will thus be used to discuss both the role of the EU in international environmental standard-setting and the rising importance of China in this domain. Looking at standard-setting from the perspective of national interests seems reasonable as policymakers are particularly sensitive to the revendications of domestic industrial groups, chiefly when it comes to protecting their shares of the global economy. Hence, the key assumption of this research will be that both the EU and China are promoting emission standards which are compatible with the interests of their domestic automotive sectors, within institutions that are considered to be adequate for the fulfilment of such preferences. In the next section, the role of the EU as a global regulator in environmental policy will be discussed.

b. The EU as a global environmental regulator

As early as 2001, the European Union began to perceive itself as a global power able to influence third countries through its domestic regulations (Damro, 2012). Indeed, in *European Governance: A White Paper*, a document aimed at guiding the Union's governance at the dawn of the 21st century, the Commission of the European Communities, the predecessor of the European Commission, emphasised the nexus between the internal and external dimensions of policymaking:

"The objectives of peace, growth, employment and social justice pursued within the Union must also be promoted outside for them to be effectively attained at both European and global level. This responds to citizens' expectations for a powerful Union on a world stage [...]. By acknowledging the global dimension more strongly, the Union will strengthen its voice in multilateral negotiations." (Commission of the European Communities, 2001: 26)

Among all policy areas in which the European Union has the power to legislate, environmental policy is undoubtedly the one where this linkage between internal and external policymaking has been particularly salient. For instance, in 2009, as a reaction to the stall in international climate negotiations, the EU made a big step towards its role as a global regulator through the Energy and Climate Package which was extending the legal effects of the Union's environmental laws to third countries' actors, such as in the aviation industry (Birchfield, 2015). Nevertheless, the EU's influence on international environmental standard-setting started, *de facto*, well before 2009. Indeed, since the 1990s, the European Union has been playing a key role in setting international standards for car

exhaust emissions (Morgera and Kulovesi, 2020). As illustrated by Holzinger and Sommerer (2014), in 1991, not only the Union adopted its own standard – the so-called Euro 1 standard – but it also managed to export it, through the United Nations Economic Commission for Europe (UN ECE). Nowadays, although emission standards have become increasingly stricter, culminating in the current Euro 6 standard, they are a benchmark for many countries, even outside the European continent (ibid.).

Countries	Light passengers and commercial vehicles produced in 2007 (in units)
European Union	19 717 643
Japan	11 596 327
United States	10 780 729
China	8 882 456
South Korea	4 086 308
Rest of the World	18 089 233
Total	73 152 696

Table 1: The Top-5 car producers in 2007 (author's elaboration on OICA data)

Interestingly, the promotion of the Euro emission standards at an international level represents an example of how the European Union used both the externalisation of its legislation and forum shopping to promote its domestic policy preferences. On the one hand, although the Euro standard regulations per se did not include any clauses on the legal effects of the legislation beyond the EU borders, the strong position of the European automotive market in the international economy has favoured the Union's use of its market power (Lavenex, 2014). Indeed, in 2007, when Regulation n°715/2007 establishing the Euro 5 and Euro 6 standards was approved, the EU was not only the largest producer of light passenger and commercial vehicles in the world (Table 1), but it was also the most important consumer market for the automotive industry, representing alone more than a fourth of the global car sales (Figure 1). It must be noted that Article 4 of the Regulation, on manufacturers' obligations, referred to any manufacturer producing "vehicles sold, registered or put into service in the [Union]" (Regulation (EC) 715/2007, 2007: 6), irrespectively from their nationality; implicitly conditioning non-EU producers' market access on meeting the new standards. Hence, the EU's sheer market size allowed policymakers to exercise a *de facto* market power and impose their standards on the automotive industry, well beyond the Union's borders. The externalisation of Euro 6, in particular, was of great importance for European policymakers, as its stringent standards represented first and foremost a tool for the international fight against climate change, at a time when the Union started to conceptualise itself as a global climate champion.

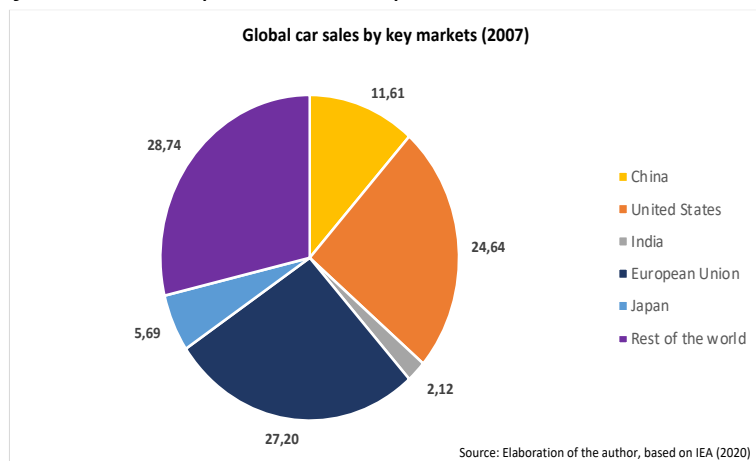


Figure 1: the EU and the global automotive industry (2007)

On another hand, the success in the export of the Euro standards can be attributed also to the synergies that have been established, over time, between European carmakers, regulators and the United Nations Economic Commission for Europe, as an international standard-setter (Bradford, 2020). The latter, created in 1947, is the UN regional commission that aims to promote pan-

European economic integration. Since its inception, one of UN ECE's key areas of focus has been vehicle regulation (Berthelot and Rayment, 2007). In the 1950s, at a time when Europe was undergoing great economic expansion and thus cars were becoming a symbol of wealth, the European Communities benefited from UN ECE's regulatory activity and imported its exhaust emission standards to control pollution (Holzinger and Sommerer, 2014). Since the early 1990s, the regulatory capacity gained by the European Union - underscored by the extensive presence of its member states and car manufacturers in the UN ECE's Group of Rapporteurs on Pollution and Energy - has allowed this phenomenon to be reversed, and the Union has begun exporting its preferences to the UN body (Lavenex, 2014). For the latter, the EU's support was primordial, not only because it represented the largest bloc within the Commission, but also because the world's most important

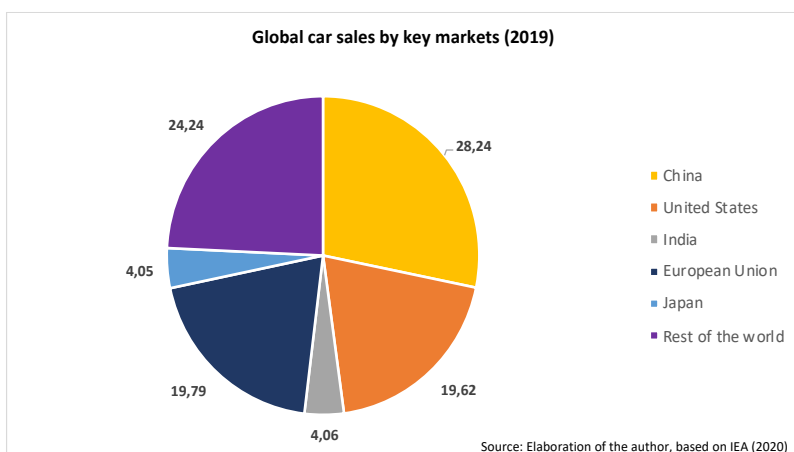


Figure 2: The Chinese leadership in car sales (2019)

automakers fell under its jurisdiction. As a result, the Euro standards have been easily transformed into UN ECE regulations, hence becoming part of the United Nations soft law. This increased their salience and served as a model for non-EU countries seeking to regulate vehicles exhaust emissions.

However, all that glitters is not gold. While it is true that the Euro standards are a good example of how the EU exercises its market power, it is also true that the conditions which led to the success of these standards seem to be gradually vanishing. For instance, in 2019, the Chinese market represented nearly 30% of the total car sales, which made it the most important consumer market in relative terms (Figure 2). Also, according to the International Organization of Motor Vehicle Manufacturers, in 2022, Chinese production was by far the largest worldwide (Table 2). It is therefore legitimate to wonder whether Market Power Europe, at least in the automotive sector, is really an irreversible phenomenon, and if not, what factors may lead to the end of the EU's regulatory power.

Countries	Light passengers and commercial vehicles produced in 2022 (in units)
China	27 020 615
European Union	12 924 596
United States	10 060 339
Japan	7 835 519
India	5 456 857
Rest of the World	21 718 802
Total	85 016 728

Table 2: China's overtaking of the EU in car production (author's elaboration on OICA data)

c. The rise of China as an independent regulator in the automotive sector

Placing market power and regulatory capacity as essential parameters for analysing the concept of influence in international standard-setting risks an underestimation of the salience that certain actors in the Global South may have on the international political economy. The literature on policy

diffusion, however, provides interesting insights into the role of third-country governments in enabling, or hindering, the transfer of regulations from the Global North into their legislation. Policy diffusion has been defined as the “spread of policies across and within political systems” (Knill, 2005: 766). According to Diane Stone (2012), the effectiveness of such diffusion depends on the porosity of a country’s institutional architecture, i.e., the country’s exposure to professional and epistemic networks and the propensity of the government to adopt policies (and regulations) promoted by external policy agents. Hence, governments are not seen as passively accepting the rules dictated by the sheer size of Western Markets (in our case, of the EU Single Market), but they are actively part of the process of diffusion: they can obstacle other regulators’ power. Furthermore, in some cases, it has been demonstrated that policy diffusion could be enabled horizontally, within countries from the Global South (Stone et al., 2020). Analysing these types of phenomena could thus be useful in understanding the limits of the EU regulatory power.

Among the countries of the Global South, China can be considered the main challenger to Western-driven standard-setting. With the launch of the Made in China 2025 (MIC2025) industrial strategy in May 2015, the country progressively developed the awareness that greater intervention in international standard-setting benefits the country’s power of influence. Released by the State Council, the strategy was aiming at making the country a “manufacturing powerhouse that leads the development of the global manufacturing industry” by improving innovation capabilities and fostering smart manufacturing (The State Council of the People’s Republic of China, 2015: 2). The document also emphasised the need for the country to strengthen its standards system and promote “the process of the internationalization of China’s standards” (ibid.: 11). Interestingly, as a result of a national reflection that started in 2018, the State Council and the Chinese Communist Party complemented the MIC2025 industrial strategy with the publication, in 2021, of the National Standardization Development Outline, also known as China Standards 2035. The document not only urged both the private and the public sector to boost the development of national standards, but it also highlighted the need to improve the level of internationalisation of domestic standards, by engaging in international cooperation on standards and diplomatic action within relevant fora (Xinhua News Agency, 2021). These activities are seen as instrumental to the pursuit of national interest.

Among the sectors supported by the Chinese government in its industrial and standards strategies, the automotive industry is certainly one of the most relevant. More precisely, Chinese policymakers refer, in the MIC2025 strategy, to NEVs as a national strategic competitive industry (The State Council of the People’s Republic of China, 2015). In fact, as mentioned in the previous section, during the last decade Chinese car manufacturers overtook Europe’s leadership in the industry. On top of this, the country is the undisputed leader in the electric vehicles (EVs) segment. By way of illustration, the sales of electric vehicles in China have been multiplied by six, between 2020 and 2022, while for the EU they barely doubled (Figure 3). Also, in 2022, sales in China were three times higher than in the EU. China’s leadership in the EVs segment of the automotive industry has been possible thanks to substantial subsidies from the Government, chiefly to firms involved in the development of green technologies. For example, the Chinese manufacturer BYD became a global leader in the production

of EVs after having developed, with the Government’s support, more than a decade of expertise in the development of batteries (Hawkins, 2023). The latter are essential components of EVs, and the control of their production ensures a key role in the value chain.

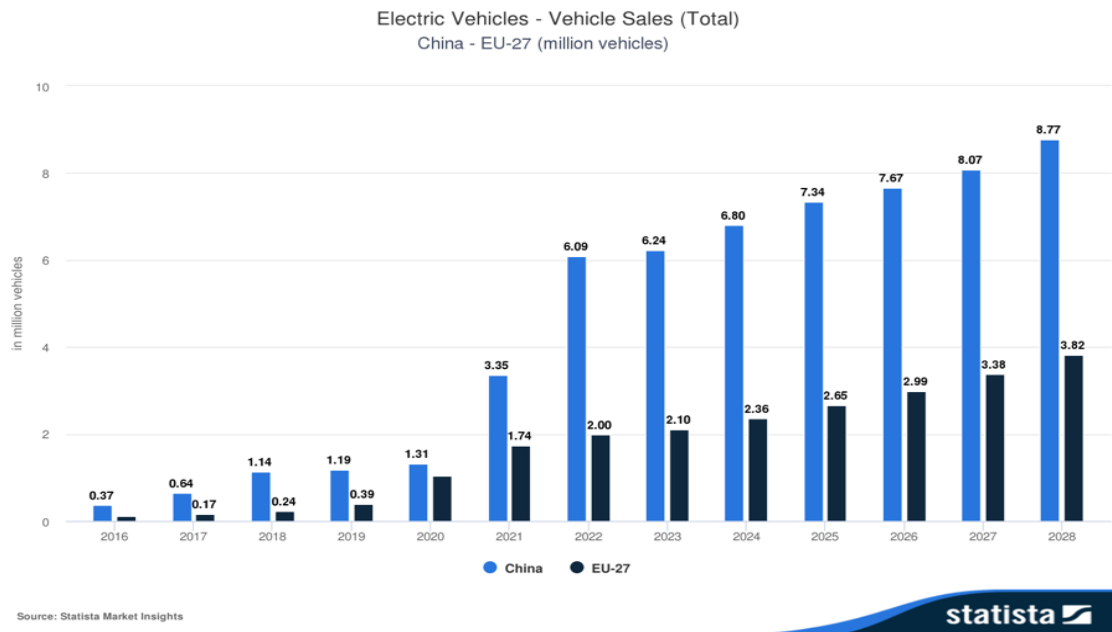


Figure 3: The evolution of the Electric Vehicles market in China and the EU

This evolution of China’s automotive industry had significant implications for the country’s adherence to international standards. Since 2000, Beijing decided to regulate vehicle exhaust emissions - as a response to the increasing levels of air pollution – by importing in its legislation the Euro 1 standard (Saikawa and Urpelainen, 2014). At the time, China's automotive industry was weak but growing rapidly, and the central government opted for regulatory intervention to prevent the potential negative effects of emissions on public health. Back then, China did not have a consolidated regulatory capacity in the sector and emissions regulation necessarily had to be based on Beijing's preferences regarding which standards to import (Rousselin, 2012). The large presence of European companies in the country, through joint ventures, prompted the central government to opt for Euro standards, although several national players objected. Since then, Beijing has regularly mirrored the successive updates of the Euro standards, up to the adoption of the China 6a standard - equivalent to Euro 6 - in 2016.

Nevertheless, the situation is now changing radically. Indeed, in December 2016, the central government not just mirrored Euro 6, but also announced a second stage of the China 6 standard, the so-called China 6b, which entered into force in July 2023 (Opletal, 2023). The latter conversely to China 6a - which was in force between 2020 and 2023 – is even stricter than Euro 6 (for comparison, see Table 3). In fact, China 6b has such low emission standards that EVs are the only viable production option for car manufacturers, thus favouring Chinese firms (Bleakley, 2023). This standard also represents China’s first step as an independent regulator in the field of exhaust emissions and is the first concrete case of Beijing challenging European standards, through a race to the top in a sector in which the country holds industrial leadership. Therefore, this research will analyse the development of the China 6b standard - and its implications on the world economy - to

understand whether it still retains a rationale anchored to European standards, or whether it marks the (potential) reversibility of Market Power Europe in the automotive sector.

Type of vehicle	Standard	Emission Limits (in g/km)											
		Carbon Monoxide (CO)		Hydrocarbons (HC)		Non-methans Hydrocarbons (NMHC)		Oxides of Nitrogen (NOx)		HC+NOx		Particulate Matter (PM)	
		Gasoline	Diesel	Gasoline	Diesel	Gasoline	Diesel	Gasoline	Diesel	Gasoline	Diesel	Gasoline	Diesel
M1	Euro 6	1.0	0.5	0.1	-	0.068	-	0.06	0.08	-	0.17	0.005	0.005
	China 6b	0.5	-	0.05	-	0.035	-	0.035	-	-	-	0.003	-
N1-I	Euro 6	1.0	0.5	0.1	-	0.068	-	0.06	0.08	-	0.17	0.005	0.005
	China 6b	0.5	-	0.05	-	0.035	-	0.035	-	-	-	0.003	-
N1-II	Euro 6	1.81	0.63	0.13	-	0.09	-	0.075	0.105	-	0.195	0.005	0.005
	China 6b	0.63	-	0.065	-	0.045	-	0.045	-	-	-	0.003	-
N1-III	Euro 6	2.27	0.74	0.16	-	0.108	-	0.082	0.125	-	0.215	0.005	0.005
	China 6b	0.74	-	0.08	-	0.055	-	0.05	-	-	-	0.003	-

Table 3: A comparison between Euro 6 and China 6b (author's elaboration on European Commission and ICCT data)

d. Understanding the limits of the EU regulatory power: a methodological consideration

As already mentioned, this research aims at contributing to the debate on the EU's global regulatory power by investigating the limits of Market Power Europe. Assuming that international standard setting is a process based on intergovernmentalism allows us to place States at the centre of the analysis. The latter have preferences in terms of standard-setting that are dictated – among other things - by industrial policy needs. Indeed, as the European experience shows, it is in those industries (and fields) where the European Union has established global leadership that Market Power Europe is developed. To understand the limits of this concept, it is thus necessary to look at industrial sectors in which the EU has now lost prominence. In this research, the case of the automotive industry and the implementation of the China 6b standard will be studied as a necessary condition counterfactual. According to Mahoney and Barrenechea, the latter refers to a counterfactual proposition in which “the actual world antecedent condition [is] essential for the outcome” (Mahoney and Barrenechea, 2019: 310). Hence, if the EU loses its leadership in a sector, it will lose the ability to export its own standards and other powers will begin to develop theirs. In our case, if the EU loses its leadership in the automotive sector, it will lose the ability to export the Euro standards.

Based on what has been discussed in the previous section, we can argue that some sort of positive correlation exists between the Union's loss of salience in the automotive sector and China's deviation from Euro standards with the adoption of China 6b. However, in order to understand how the first led to the second, unpacking the causal mechanisms underpinning this process appears necessary. To do so, a theory-building process tracing (TBPT) will be performed. As conceptualised by Beach and Pedersen this process tracing approach “uses a structured analysis [...] to detect a plausible hypothetical causal mechanism whereby X is linked with Y” (Beach and Pedersen, 2014: 16). A main advantage of this approach is that it is generalisable and aims at building “middle-range theories formulated as a causal mechanism that works within a [spatially and temporally] bounded context” (ibid.:61). Ontologically, however, this research will slightly diverge from Beach and Pedersen's original conceptualisation of TBPT as far as it concerns their interpretation of causal mechanisms within a middle-range theory. In fact, this study adheres to Tuukka Kaidesoja's (2019) view that setting temporal boundaries while building a middle-range theory on causal mechanisms is too restrictive. In today's world, temporal linearity and non-parallel sequences of events are rare

to find, as social phenomena are increasingly interrelated. Causal mechanisms must be interpreted as a series of events which are not necessarily linear. Therefore, the alternative theory-building process tracing approach that will be used, will aim at building a middle-range theory structured on the following prerequisites:

“1) A **conceptual framework** about social phenomena [as] a set of interrelated concepts that is developed in close connection with empirical analysis.

2) A **mechanism schema** [as] an abstract description of a causal mechanism in terms of interacting entities and activities.

3) A **cluster of mechanism-based explanations** [which] consist of all explanations that are based on a mechanism schema(s) of the theory.” (ibid.: 28)

To develop such a middle-range theory, a large amount of data will be needed. Considering that the analysed cause (X) and the outcome (Y) are respectively the Union's loss of salience in the automotive sector and China's deviation from Euro standards, the qualitative material studied will be collected from two different time frames. The first, from 2016 to date, corresponds to the introduction and the progressive implementation of China 6b. The second, between 2009 and 2015, coincides with the consolidation of the automotive industry as a pillar sector for the Chinese economy. This research will be looking, in particular, at legislative documents, national industrial strategies, and newspaper articles retrieved by using a news aggregator (FACTIVA).

III. Back to the origins: the 2008 automotive crisis and its impact on standard-setting

a. China 6b as a driver of sustainable development

The first step to tracing the causal mechanism leading to the adoption of China 6b is understanding the immediate reasons that pushed Chinese policymakers to release tighter standards. To do so, it is worth unpacking how this regulation has been framed by the Chinese government and other stakeholders. Based on the qualitative analysis of newspaper articles, industrial policy strategies, and Chinese government reports published since the standard's release, it is possible to observe some similarities in the institutional narratives used when addressing the introduction of China 6b. More specifically, there are two *files rouges* linking all the documents considered for this first stage of research: the environmental policy frame and the industrial policy one. The first will be presented in this section, while the second will be discussed in the following one.

In 2016, simultaneously with the implementation of China 5, the strong support of Tier-1 cities² for a draconian fight against air pollution persuaded national industry players of the government's willingness to bring the Chinese car fleet to a complete transition to electric cars by adopting even tougher standards. According to one of the newspaper articles analysed, during the 12th National

² Although the central government does not recognise the existence of a city tier system, Tier-1 cities are generally identified as Beijing, Shanghai, Guangzhou, Shenzhen

People Congress in March of that year, leading figures in the Chinese automotive industry were calling for “the government [to] release the National VI emissions standard as soon as possible” allowing Chinese firms to have enough time for research and development (China Daily, 2016: 4). The reason why car manufacturers were certain of the publication of stricter regulations – although these were not announced during the Congress itself - was the unsatisfactory results on air pollution in large metropolises, as well as the change of mentality towards environmental protection. Indeed, in the 13th Five-Year Plan for Economic and Social Development, published as a result of the Congress, the leadership of the Chinese Communist Party took the pledge to improve the country’s environmental governance (Central Committee of the Communist Party of China, 2016). To implement such commitment, the State Council released a few months later, in December, a Notice on the 13th Five-Year Ecological Environmental Protection Planning, where the formulation of tighter emission rules was seen as a way to foster innovation and reduce air pollution (The State Council of The People’s Republic of China, 2016). Interestingly, the Notice was published only two weeks before the release of China 6 standards, thus supporting the argument that environmental motivations were behind the adoption of the new norm.

Yet, one might wonder why China chose to embrace a regulation (China 6b) which is deemed to be the toughest worldwide, with emission limits that are even lower than the ones of the recently proposed Euro 7 regulation³. In fact, compliance with China 6a, which is equivalent to Euro 5, would have been sufficient to bring the country in line with international standards on air pollution. Therefore, analysing the way Chinese media have framed the implementation of the new rules may provide us with an answer. The research revealed a link between the framing of emission standards as an environmental policy and two initiatives particularly important to the Chinese establishment, namely Blue Skies and the Beautiful China Initiative. On the one hand, Blue Skies refers to the launch by Prime Minister Li Keqiang, in 2014, of a “war on air pollution”. The term was first used, on paper, in the 2017 Government Work Report. In the latter, the commitment to “make [Chinese] skies blue again” (The State Council of the People’s Republic of China, 2017) was presented as an essential element for the country to be seen as a credible actor in international environmental policy, and the enactment of China 6 was framed as one of the five key initiatives to reach that goal. On the other hand, the Beautiful China Initiative (BCI) lies at the core of Xi Jinping’s long-term vision of China’s development and aims at “building [through a new mode of sustainable economic development] a modern socialist civilization with Chinese characteristics” (Fang et al., 2020: 692). However, to understand the relevance of this policy -as well as the salience of the fight against air pollution - it is important to dwell on how these concepts relate to the principle of China’s rejuvenation.

China’s rejuvenation is a key element of Xi Jinping Thought (hereinafter Xi’ism) and a pivotal component of China’s politics since the 19th National Congress of the Chinese Communist Party, in 2017. According to Xi’ism, national rejuvenation is essential to develop the “culture of socialism with Chinese characteristics, [to blaze] a new trail for other developing countries to achieve modernization” (Jinping, 2017: 9). To achieve rejuvenation, President Xi Jinping laid out a model of

³ For an overview on the proposed Euro 7 standard, see European Commission 2022.

economic and social improvement underpinned by people-centred development and harmony between Humans and nature, which led to the adoption, among others, of the Beautiful China Initiative. In his view, China must industrialise by leveraging the country's know-how in green technologies (which will be discussed later), to improve living standards and make citizens happier.

Overall, Beijing seems to use the tightening of emission standards as a way to improve air pollution in the country – thus reaching harmony between Humans and nature – and to show the world that socialism with Chinese characteristics can represent a valid alternative to a Western-driven model of development, even in times of climate change. The central government has shown that it has its own goals in this area, going beyond those of the European Union, whose proposal for a Euro 7 standard is less ambitious.

b. Vehicle emission standards as a key element of industrial policy: the influence of Xi Jinping's Thought

In the months before the implementation of the China 6b standard, several newspaper articles analysed were highlighting that the new regulation's goal was “[stabilising] the mentality of dealers and carmakers” (Yushuo, 2023: 1) and “[expanding] the consumption of automobiles in the country” (Wenqian, 2023: 1). Such positive contentions seem to contradict the scepticism of part of public opinion and car manufacturers, when the first part of the legislation (China 6a) was in the process of being implemented. As a matter of fact, in 2019, the perception was that “domestic brands [were] less prepared for the switch than the Chinese joint ventures of foreign auto makers” (Wong, 2019: 1). Pessimism reigned among domestic players for two reasons: firstly, there were doubts over the capacity of the national industry to absorb the shock caused by the stranding of non-compliant vehicles; secondly, compliance with the new standards needed research and development of new technologies, thus burdening on balance sheets.

However, this change in perception illustrates well the role the government has played in making the implementation of the China 6B standard a matter of industrial policy. Indeed, the research carried out highlights how Beijing - in the years leading up to the implementation of the standards - made alternating use of economic incentives, both on the consumer and manufacturer side, to stimulate demand for domestic NEVs and innovation in green technologies (Chao, 2021). In particular, the role of the State in the transition to NEVs became clear in two moments: in 2020 and in 2023, before the entering into force of each of the two stages of the China 6 standard. In those years, two price wars in the automotive industry were triggered by the need, for firms, to clear out vehicles that did not comply with China 6a and China 6b. In both situations, at first, the central government did not intervene and allowed “prices of cars, especially fuel-powered cars, [to drop]” (The State Council of the People's Republic of China, 2023: 8). Falling car prices were the result of the strong competition between domestic manufacturers. Similar dynamics took place in the NEV segment, especially on the eve of China 6b's entry into force, due to the vast number of NEV models released. In the end, Beijing acted as a safety net – exclusively for Chinese firms - by intervening when the situation was getting worse (Yushuo, 2023). On the one hand, the central government

allowed an extension of the deadline for the sale of fossil fuel vehicles, until December 2023, thus permitting a smoother transition to the new standards. On the other hand, it has approved a series of incentives - such as free insurance for charging piles and the regulation of parking fees – to boost the consumption of NEVs. On top of these policies, a new version of the *New Energy Vehicle Industrial Development Plan* was adopted in 2020 to guide domestic companies towards ever-greater technological innovation (International Energy Agency, 2022).

Beijing's attitude towards the promotion of NEVs illustrates well some pillars of China's industrial policy under Xi'ism. The latter are embodied in two documents that are fundamental to grasping the industrial policy implications of Xi Jinping Thought, namely the Made in China 2025 (MIC 2025) and the China Standards 2035 strategies. The first, launched in 2015, represents the country's roadmap in industrial policy. As has been highlighted before, MIC 2025 aims at securing China's position as a "manufacturing powerhouse that leads the development of the global manufacturing industry" (The State Council of the People's Republic of China, 2015: 2) and by fostering local innovations. From this perspective, it is clear that the objective of stabilising carmakers' mentality - to orient them towards NEVs through the adoption of China 6b - is instrumental to boosting indigenous research in the field of green technologies. The latter is a domain particularly salient for China as the country controls the supply of the raw materials required for the transition and is a leading investor in the sector. Moreover, China 6b can be considered a symbol of China's aspirations within the China Standards 2035 strategy. Indeed, this standard fulfils the objective of "[establishing and improving standard-setting] for a carbon emission peak and carbon neutrality" (Xinhua News Agency, 2021: 5), as emphasised in the strategy: China 6b also responds to the ambition of promoting "the formulation of international standards in areas such as climate change" (ibid.: 9). Indeed, by putting China at the forefront of the transition to an electric-only car fleet, it introduces rules which have the potential of becoming a reference point for other countries.

On the whole, if we consider China 6b as instrumental for the realisation of the MIC 2025 and China Standards 2035 strategies, we can confidently contend that its implementation has allowed Xi'ism to have some initial positive outcomes. As reported by several newspaper articles considered in this study, on the eve of China 6b's entry into force, the Chinese automotive industry - particularly focused on the production of NEVs – has succeeded in being innovative, cheap, and reactive to the challenges of climate change; foreign firms have been (almost) completely crowded out from the domestic market (Kubota and Cheng, 2023). Ultimately, these results can be summarised by a passage from President Xi Jinping's speech during the 19th National Congress of the Communist Party of China in 2017:

"The Party [has propelled] China into a leading position in terms of economic and technological strength [...]. China's international standing has risen as never before."
(Jinping, 2017:9)

c. The 2009 automotive crisis and the consolidation of Chinese automotive industry

The previous two sections examined the main reasons leading to the adoption of China 6b and the underlying rationale. However, to reconstruct the entire causal mechanism, it is also necessary to understand how the automotive sector became central to the implementation of China's industrial policy and the realisation of Xi'ism. To this end, the scope of the qualitative analysis should be refocused on another key period for the Chinese automotive industry, namely 2009. In that year, China surpassed the United States in sales by 3.1 million units, thus becoming the most important market in the world (McDonald, 2009). In this research, the evolution of the Chinese automotive industry since 1949 will not be discussed, as the process tracing intends to focus on the link between China's overtaking of the leadership in the industry and the adoption of the China 6b standard, thus excluding any events prior to 2009. It should be pointed out, however, that the great overtaking of 2009 was a consequence of the 2008 global economic crisis - which caused an industry slowdown in the US and EU - and of particularly successful policies adopted by Beijing. This section aims at illustrating how the overtaking of 2009 allowed China's automotive industry to become pivotal for the accomplishment – or at least the implementation - of Xi'ism. Based on the analysis of institutional documents released by the Chinese government between 2009 and 2015, the findings presented in this section show the existence of linkages between the policies adopted in 2009 and the emergence and consolidation of four pillars underpinning Xi'ism. The latter are economic, political, social, and ecological development.

In March 2009, as a response to the global automotive crisis, the State Council released the *Automotive Industry Readjustment and Revitalization Plan*, which introduced a series of incentives for domestic car manufacturers and consumers, over a three-year period. In the Plan, the State Council was acknowledging that the automotive industry became, over time, “an important pillar industry of the national economy” (The State Council of the People's Republic of China, 2009: 1) because of the vast impact on employment and economic growth of its long value chain, which goes from the extraction of raw materials to sale activities. Through measures such as the “reduction of sales tax, new capital for investment and a decision to give subsidies for early retirement” (International Labour Organisation, 2010: 29), Beijing adopted a consumption-driven approach to stimulate vehicle purchases, with benefits for the entire Chinese economy given the knock-on effect on all sectors involved in the value chain. Moreover, the central government operated a consolidation of the industry by supporting the creation of four national champions: SAIC Motor, Dongfeng, FAW and Chang'an (Pawlicki and Luo, 2017). These firms have been facilitated in scaling up the value chain, from the control of raw materials to the production of vehicles. This strategy made the growth of the automotive industry a long-term phenomenon. In 2022, this industry represented 10% of China's GDP, making it a key component of the country's economic development (Zou, 2022).

In parallel to the incentives for consumption, the Plan emphasised the need, for all enterprises in China, to develop independent innovation in the field of NEVs. Hence, the central government

introduced the first comprehensive national strategy aiming at fostering the production of hybrid, plug-in, pure electric and fuel-cell vehicles to a share of 5% of the total national production within 2011 (International Labour Organisation, 2010). The objective was to explore - albeit to a lesser extent than the more recent measures discussed earlier - a market segment that would benefit the environment by reducing air pollution and promoting more efficient energy consumption. Incidentally, 2009 was the year when electric vehicles were extensively discussed in the framework of an international forum, i.e., the Copenhagen Summit, as an actionable solution to fight against climate change. Back then, NEVs were at an embryonic stage and China aimed - with this new policy - to acquire the technologies simultaneously with their development. In this strategy, a prominent role was played by foreign-invested joint ventures. Indeed, under Forced Technology Transfer legislation, foreign companies interested in investing in China are required to form a joint venture with local firms, thus facilitating the acquisition of Western technologies (Saikawa and Urpelainen, 2014). Owing to this, the country's industrial policy has been successful in establishing the automotive sector's expertise in the production of electric vehicles, thus making them an essential tool in China's climate change strategy. By way of illustration, in 2014, according to the Roland Berger Index on e-mobility, China had the leadership in State R&D funding for e-mobility, with investments for almost 8 billion € (Bernhart et al., 2015).

In terms of social and political development, an important role was played by the "Send Cars to the Countryside" Initiative. The latter channelled some of the consumption incentives to rural areas, highlighting the importance of the inland regions to Beijing (Ministry of Finance of the People's Republic of China, 2009). Prior to 2009, levels of car ownership in China's interior regions were very low. This policy, which stimulated a new consumer base, was not only a measure to counter the global economic crisis, but its main goal was to "expand rural consumption, accelerate the upgrading of rural consumption, and improve the quality of life of farmers" (ibid.: 1). In other words, according to Beijing, this Initiative constituted a social policy designed to empower the rural population and make them part of the Chinese middle class. For instance, it is significant that, in the 2012 Progress in China's Human Rights report released by the State Council, car ownership was mentioned as a parameter to evaluate the improvement of the population's living conditions (The State Council of the People's Republic of China, 2013). Politically, promoting the Initiative was perfect to consolidate the already strong support for the Communist Party in the countryside, and show to the world that, thanks to the Socialism with Chinese characteristics, even less advantaged citizens could access private property. The effectiveness of this initiative has also been made possible by the fact that technological innovation has led to increasingly cheaper car models. In four years, between 2013 and 2017, the level of car ownership in inland regions has indeed doubled (Kemp, 2019).

d. Further considerations on the evolution of the European automotive industry

To better appreciate the relevance of the previous section's main findings, it is worth reflecting briefly on the dynamics that have occurred in the European automotive sector since 2009 and to understand why, to date, this sector has failed to regain its pre-crisis international salience. Indeed, the outbreak of the Global Financial Crisis led to a recession and a drop in global demand, which

also affected car sales (Gajdos, 2012). In this sense, the aforementioned Chinese policies - aimed at increasing the local consumer base - were strategic in making China an attractive market, compared to the low levels of European demand. In fact, as Pavlínek argued, “since saturated vehicle markets of developed economies are typified by replacement demand, consumers tend to postpone purchases of new vehicles during periods of economic uncertainty” (Pavlínek, 2012: 20-21). Thus, in addition to providing European carmakers with cheap labour – which explains the relocation of production - China has provided them with a dynamic consumer base of households willing to buy a new vehicle, even during a financial crisis. From a Global Value Chain (GVC) perspective, it can be argued that the 2009 crisis allowed China to gain a strong position in two crucial stages of the automotive industry, namely production and sales, while company ownership and management remained in Europe. Yet, this setting of the GVC has contributed to making the loss of the EU salience in the car industry structural.

In fact, the increasing relocation of European firms – especially to China – in the aftermath of the Global Financial Crisis caused concerns among European policymakers, as the sector contributed significantly - both directly and indirectly - to value creation and employment (Fredriksson et al., 2018). The importance of the industry for the EU economy contributed to European carmakers’ resistance to the shift to electric vehicles. Indeed, although firms were already investing in Research and Development in the field, they were opposing the adoption of such technologies as institutionalised standards. It is very significant, for instance, that in 2014 Sergio Marchionne, the CEO of Fiat Chrysler Automobiles, stated that European manufacturers the sale of electric cars was not economically profitable (Beech, 2014). This was at a time when, on the other side of the world, China was supporting its domestic industry by focusing on innovation. The latter was possible mainly due to China’s consolidation in the production activities of the GVC, and more specifically the extraction of raw materials (Gaddi and Garbellini, 2021). Furthermore, from a policy design perspective, the trade-off between protecting the economic interests of carmakers and undertaking - perhaps riskier - investments in the green transition is reflected in the way European policies have been designed. For example, the so-called Dieselgate scandal illustrated how car manufacturers in the EU were able to exploit grey areas in legislation to circumvent the adoption of new standards (Skeete, 2017).

Today, obstacles to innovation in Europe are still present. As a matter of fact, the recent debate on phasing out fossil fuel vehicles in the EU by 2035 has highlighted how divisive the issue is in the Union. Large car manufacturing countries, such as Germany, argued that such a norm could undermine the competitiveness of European manufacturers vis-à-vis Chinese ones, and with a consequent impact on employment (Posaner et al., 2023). In fact, although European firms have played – through foreign investments and joint ventures - a relevant role in the development of China’s domestic industry, Chinese carmakers are today leading the way in the field of innovation and NEVs (Transport and Environment, 2018). If the Union will not make any leap forward in terms of innovation in the short to medium term, China will be able to completely oust European companies from its market through the implementation of China 6b. Indeed, as mentioned in the previous section, the market shares of European car manufacturers in China already declining.

Potentially, these dynamics could have an impact on the durability of the Union's power of influence in car emissions standards.

e. Building a middle-range theory on the establishment of China 6b

After retracing all the steps of the causal mechanism linking China's overtaking of the automotive sector to adopting the China 6b standard, it is time to develop a generalisable middle-range theory made of a conceptual framework, a mechanism schema, and a cluster of mechanism-based explanations.

As outlined in Part II, conceptually, standard setting in the international arena must be interpreted as an intergovernmental process, through which governments aim at shaping the rules of the game by uploading their preferences to the international community. Standard-setters are thus gatekeepers who have the power to decide the winners and the losers in a particular sector. More specifically, governments use their power of influence when it comes to promoting their domestic firms. In fact, succeeding in shaping global standards can increase a country's economic power. In a world increasingly multipolar, the latter has become an important element of international relations. To use Susan Strange's words:

“In the new competitive game between states, it is not relational power [...] but structural power that counts. [The latter] is the power to choose and to shape the structures of the global political economy within which other states, their political institutions, their economic enterprises, and (not least) their professional people have to operate.” (Strange, 1987: 564-565)

Evidence from the literature shows that – at least for the EU – there are some economic and regulatory determinants which can influence the ability of a State or supranational actor to exert its power of influence. On the one hand, market size, expressed both as consumer base and importance of its domestic firms, is pivotal in fostering a country's salience in the global economy. On the other hand, only through a consolidated regulatory capacity, namely the expertise in designing regulations, governments can set stringent and non-bypassable standards. As it has been suggested in this research, the relational component of these factors must not be underestimated, meaning that each country's performance depends on the relative performance of others.

With this regard, the case of the China 6b standard is perfect to discuss the limits of the EU's conceptualisation as a global unilateral regulator. Observing the evolution of the Chinese automotive industry, it was conjectured the existence of a positive correlation between the Union's loss of salience in the automotive sector favouring China and the latter's deviation from Euro standards with the adoption of China 6b. After performing a process tracing, not only the correlation was confirmed, but the causal mechanism linking the two events was highlighted. Figure 4 illustrates the different steps forming this causal mechanism. In this process, the automotive crisis of 2008 provided a window of opportunity that enabled China to take the lead in the industry. The central

government, then, operated a consolidation of its position by adopting a series of comprehensive policies in support of the private sector. The success of these policies contributed to the development of a State mentality, i.e., Xi'ism, based on enhancing the country's status in the international arena through a new conception of economic, social and environmental development. When a certain level of implementation of the new State mentality was reached, adherence to the Euro standard was no longer sufficient to meet the ambitions of the central government, which therefore decided to adopt its own - more stringent - standard to be promoted worldwide. The passage from one stage of the mechanism to the other has been facilitated by the existence of three overarching phenomena: climate change, China's challenge to Western-driven economic governance, and the responsiveness of Chinese firms. In particular, the fight against climate change created an opportunity for China to specialise in emerging sectors such as electric vehicles, by taking advantage of the country's control of critical raw materials supply and of knowledge flows as a result of Forced Technology Transfers legislation.

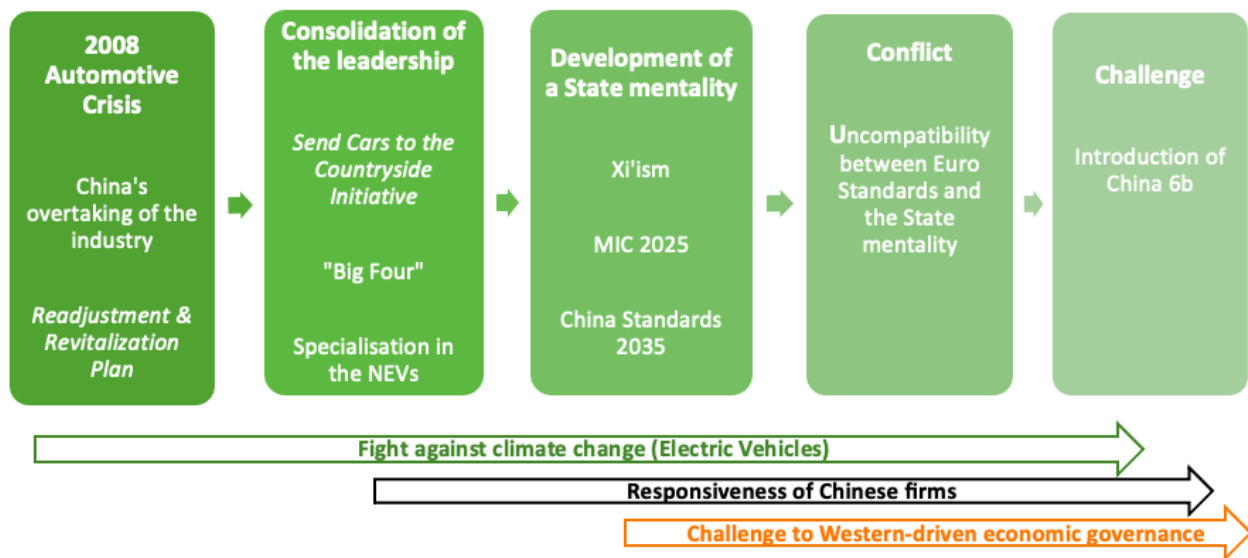


Figure 4: The causal mechanism underlying the adoption of China 6b (author's elaboration)

Generalising this causal mechanism, we can get an idea of what could be the limits of the concept of Market Power Europe and related theories. In Figure 5, an abstract version of the causal mechanism is proposed. The EU's loss of regulatory influence in a sector can originate from the occurrence of a window of opportunity that enables a challenging actor to overtake the Union's relevance in the sector. This opportunity leads to a consolidation phase where the challenging actor collaborates with its domestic private sector to secure its leadership. The adoption of broad and comprehensive policies could, then, support the development of a long-term vision aiming – more in general – to increase the country's industrial capabilities and global economic influence. Once reached a certain level of implementation of the vision, the challenging actor can adopt different and more stringent standards, deviating from EU regulations, and take the lead also in sectoral standard setting. This can happen when the Union's rules are perceived by the challenging actor as too loose to compel domestic companies to complete the vision's realisation. Overall, the emergence of the mechanism outlined here can be facilitated by the presence of three factors:

- The willingness of the third country to challenge the influence of the European Union and embrace its own model of governance.
- The presence of new challenges in the international environment which triggers the expansion of new sectors and thus requires intensified international regulatory activity.
- A strong domestic private sector responsive to government preferences.



Figure 5: A general theory on the limits of the EU's power of influence (author's elaboration)

IV. Conclusion

In conclusion, the loss of the EU's dominant position in the automotive industry to China has allowed the latter to consolidate its economic power in the sector. In doing so, in the years after the 2008 crisis, the country has made the automotive industry a pillar of its development strategy. Hence, in order to fully implement this strategy - and as a challenge to a Western development model - the Chinese central government has matured the conviction that new standards were necessary both to stimulate domestic players and show the world that China is ready to act as a global regulator, thus implying a deviation from the imported European standards. In this race to the top, climate change and the private sector's support have been two key factors. On the one hand, the fight against climate change has enabled the establishment of a new market segment, i.e., New Energy Vehicles, in which China has rapidly overtaken other countries and where Chinese policymakers aspire to be global regulators. This has been possible thanks to the abundance of critical raw materials and the ease in acquiring technologies through foreign-invested joint ventures. On the other hand, the responsiveness of Chinese companies, and their intense collaboration with the State, acted as a transmission chain, allowing the new China 6b standard to quickly have an effect on the country's economic-industrial structure.

As it has been argued in the first part of this research, the failure of multilateralism in the aftermath of the Cold War, led governments to opt for a more fragmented international standard-setting environment based on minilaterals and on the externalisation of domestic regulations. Both phenomena can be studied under the lens of intergovernmentalism. As a matter of fact, they both enable States to shape institutions according to their national preferences. To be more precise, in the last decades, the externalisation of domestic regulations has become - at least in the EU and the US - the preferred way to induce other countries to adapt their legislation. Here, externalisation must be intended as the extension of the legal effects of domestic laws to (mainly) foreign actors and beyond national borders, when there is, at least, a minimal link to the country of reference. For instance, the EU conceptualisation as a global regulator is the result of a consolidated use of conditionality clauses in trade agreements negotiated with third countries. More specifically, the Union has been widely studied as a unilateral actor in international environmental governance. In fact, over time, many of the EU's internal emission mechanisms have been extended to third-

countries actors as a way to nudge them to comply with international commitments on climate change.

An interesting case is that of standards on vehicle exhaust emissions, the so-called Euro Standards. The latter have been developed since the 1990s as a consequence of European leadership in the automotive industry and the regulatory capacity gained by European Institutions. Although they were conceived as a tool to ensure good air quality in the EU - without ambitions to internationalise them – they, quickly, became a benchmark for many countries. This was mainly due to the relevance in size of the European automotive market for manufacturers all over the world. Furthermore, during the development of the Euro standards, European regulators collaborated with the UN ECE, which took over the European regulations and facilitated their export to other countries, chiefly developing ones. Among the countries which have adopted the Euro standards, China is undoubtedly the most interesting case. Beijing introduced a reference to European standards in 2000 and has since adapted to their various updates. However, the balance of power in the automotive sector has changed and China has taken the lead from Europe, since 2009. This opportunity allowed the country to specialise in the production of NEVs, bringing the domestic industry to the forefront of this market segment. Not surprisingly, in 2016, China deviated for the first time from the Euro standards by introducing China 6b. The latter is considered the most stringent regulation in the world and aims to make the Chinese car fleet exclusively electric, thus responding to the challenges that climate change imposes on the mobility sector.

In this research, theory-building process tracing was used to examine the existence of a causal mechanism for China's overtaking of the automotive industry to trigger a deviation from European norms. Yet, the purpose of such investigation was – more broadly – to discuss the limits of the Market Power Europe concept, and similar theories. Indeed, the literature on the EU's power of influence fails to address the weaknesses of such theories, as scholars do not seem to address changes in the EU's influence when it loses its market power in an area. Hence, the process tracing performed confirmed a relation between China's overtaking of the leadership in the automotive industry and the deviation from Euro Standards. The establishment of this causal mechanism has been powered by Beijing's intention of challenging the EU in the race towards the electrification of mobility. By generalising such findings, it seems clear that - at least in developing countries - the promotion of industrial policies associate to a long-term view of the country's international standing can lead, in the medium term, to the emergency of indigenous standard. This phenomenon stems from a desire to break free from the influence of industrialised countries. Therefore, it can be contended that one of the main limitations of the EU's power of influence theories is that they assume a world in which, among industrialised countries, the Union is the largest consumer market. Accordingly, they do not consider the possibility for other developing countries or economic areas to reach the same level of industrialisation. But what if China or India develop their economies to the status of developed countries? How would the balance of power with respect to Market Power Europe change? It should not be forgotten that the population of the BRICS countries combined amounts to more than 3 billion citizens, not to mention the fact that the Belt and Road Initiative includes a pool of consumers equal to about 60 percent of the world's population. Virtually, China

could thus exert its standard setting power on an economic area much bigger than the EU Single Market.

It is therefore crucial that International Relations scholars deepen their interest in the externalisation of domestic regulations, as a tool for promoting their national interest in the international chessboard. On the one hand, the literature must not limit itself to phenomena such as the Brussels or California Effects. Academics must look at how these concepts evolve with the decentralisation of economic power, in favour of certain developing countries. On the other hand, the distinction between public policy and foreign policy must, once for all, give way to greater interdependence between the concepts. In an increasingly complex world, both scholars and policymakers need to be aware that decisions taken at national level have international effects. In this research, the limitations of EU power of influence theories have been addressed by looking at a specific sector and in relation to one country, i.e., China. However, further research could take a broader approach, examining the evolution of Market Power Europe in a variety of sectors with high innovation potential. Also, the geographical scope could be widened to analyse the variations of this phenomenon between emerging countries.

V. References

- ALTER, K. J. & MEUNIER, S. 2009. The Politics of International Regime Complexity. *Perspectives on Politics*, 7, 13-24.
- BEACH, D. & PEDERSEN, R. B. 2014. *Process-Tracing Methods Foundations and Guidelines*, Ann Arbor: University of Michigan Press.
- BEECH, E. 2014. *Fiat Chrysler CEO: Please don't buy Fiat 500e electric car* [Online]. Reuters. Available: <https://www.reuters.com/article/chrsyelr-ceo-evs-idUSL1N0O71MS20140521> [Accessed September 21, 2023]
- BERNHART, W., SCHLICK, T., OLSCHESKI, I., BUSSE, A. & GARRELF, J. 2015. *E-Mobility Index Q3 2015*. Munich: Roland Berger GmbH. Available: https://www.rolandberger.com/publications/publication_pdf/roland_berger_e_mobility_index_q3_2015_20150911.pdf [Accessed August 21, 2023]
- BERTHELOT, Y. & RAYMENT, P. 2007. *Looking Back and Peering Forward: A Short History of the United Nations Economic Commission for Europe, 1947-2007*. Geneva: United Nations Economic Commission for Europe.
- BIRCHFIELD, V. L. 2015. Coercion with kid gloves? The European Union's role in shaping a global regulatory framework for aviation emissions. *Journal of European Public Policy*, 22, 1276-1294.
- BLEAKLEY, D. 2023. *China delays new pollution standard to appease overstocked car dealers* [Online]. The Driven. Available: <https://thedriven.io/2023/03/31/china-delays-new-pollution-standard-to-appease-overstocked-car-dealers/> [Accessed July 20, 2023]

- BRADFORD, A. 2020. *The Brussels Effect: How the European Union Rules the World*, Oxford: Oxford University Press.
- CENTRAL COMMITTEE OF THE COMMUNIST PARTY OF CHINA. 2016. *The 13th Five-Year Plan for Economic and Social Development of The People's Republic of China*. Beijing. Available: <https://en.ndrc.gov.cn/policies/202105/P020210527785800103339.pdf> [Accessed August 22, 2023]
- CHAO, D. 2021. *In China's vast and growing electric vehicle market, local brands have the edge* [Online]. South China Morning Post. Available: <https://www.scmp.com/comment/opinion/article/3121923/chinas-vast-and-growing-electric-vehicle-market-local-brands-have> [Accessed August 22, 2023].
- CHATZOPOULOU, S. & ANSELL, C. K. 2022. The construction of the EU as a strategic entrepreneur: the internal-external-internal nexus. *Journal of European Integration*, 45, 275-292.
- CHINA DAILY. 2016. *Delegates address auto industry challenges at two sessions* [Online]. Available: http://www.chinadaily.com.cn/business/motoring/2016-03/14/content_23851933.htm [Accessed August 22, 2023].
- COMMISSION OF THE EUROPEAN COMMUNITIES. 2001. *European Governance: A White Paper*. Brussels. Available: https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_10 [Accessed July 20, 2023]
- DAMRO, C. 2012. Market power Europe. *Journal of European Public Policy*, 19, 682-699.
- DREZNER, D. W. 2007. *All Politics Is Global: Explaining International Regulatory Regimes*, Princeton: Princeton University Press.
- EUROPEAN COMMISSION. 2022. *Proposal for a Regulation of the European Parliament and of the Council on type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7)*. Luxembourg: Office for Official Publications of the European Communities. Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0586> [Accessed August 22, 2023]
- EUROPEAN PARLIAMENT. 2023. EU carbon border adjustment mechanism. *At a glance*. Brussels. Available: [https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA\(2023\)745713](https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA(2023)745713) [Accessed July 25, 2023]
- FANG, C., WANG, Z. & LIU, H. 2020. Beautiful China Initiative: Human-nature harmony theory, evaluation index system and application. *Journal of Geographical Sciences*, 30, 691-704.
- FREDRIKSSON, G., ROTH, A., TAGLIAPIETRA, S. & VEUGELERS, R. 2018. Is the European automotive industry ready for the global electric vehicle revolution? *Bruegel Policy Contribution*, 26. Brussels: Bruegel

- GADDI, M. & GARBELLINI, N. 2021. Automotive Global Value Chains in Europe. *Working Papers*, 160. New York City: Institute for New Economic Thinking
- GAJDOS, L. 2012. *The EU automotive sector in a globalised market*. Brussels: European Parliament.
- GARGEYAS, A. 2023. *China's '2035 Standards' quest to dominate global standard-setting* [Online]. Hinrich Foundation. Available: <https://www.hinrichfoundation.com/research/article/tech/china-2035-standards-project-restructure-global-economy/#:~:text=The%20'Standards%202035'%20project%20also,for%20determining%20global%20technical%20standards.> [Accessed May 26, 2023].
- HAWKINS, A. 2023. *Battery power: how China could take charge of the electric vehicle market* [Online]. The Guardian. Available: <https://www.theguardian.com/environment/2023/jul/29/battery-power-how-china-could-take-charge-of-the-electric-vehicle-market> [Accessed July 20, 2023].
- HE, H. & YANG, L. 2017. *China's stage 6 emission standard for new light-duty vehicles (final rule)*. Washington DC: International Council on Clean Transportation. URL: <https://theicct.org/publication/chinas-stage-6-emission-standard-for-new-light-duty-vehicles-final-rule/> [Accessed July 20, 2023]
- HOLZINGER, K. & SOMMERER, T. 2014. EU environmental policy: Greening the world? In: FALKNER, G. & MULLER, P. (eds.) *EU policies in a global perspective : shaping or taking international regimes?* London ; New York: Routledge.
- HOWARD, K. & ZHU, P. 2019. *China 6: The World's Most Challenging Emissions Standard* [Online]. Available: <https://360.lubrizol.com/2019/China-6-The-Worlds-Most-Challenging-Emissions-Standard> [Accessed May 26, 2023].
- INTERNATIONAL ENERGY AGENCY. 2022. *New Energy Vehicle Industry Development Plan (2021-2035)* [Online]. Available: <https://www.iea.org/policies/15529-new-energy-vehicle-industry-development-plan-2021-2035> [Accessed August 22, 2023].
- INTERNATIONAL LABOUR ORGANISATION 2010. The Global Economic Crisis - Sectoral Coverage. Automotive Industry: Trends and reflections. *Working Papers*. Geneva. Available: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_161519.pdf [Accessed August 22, 2023]
- JINPING, X. 2017. *Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era*. Beijing.
- KAIDESOJA, T. 2019. Building middle-range theories from case studies. *Studies in History and Philosophy of Science*, 78, 23-31.
- KEMP, J. 2019. *China's car sales slump as top urban markets saturate* [Online]. Reuters. Available: <https://jp.reuters.com/article/uk-china-autos-kemp-idUKKBN1X400Y> [Accessed August 22, 2023].

- KNILL, C. 2005. Introduction: Cross-national policy convergence: concepts, approaches and explanatory factors. *Journal of European Public Policy*, 12, 764-774.
- KUBOTA, Y. & CHENG, S. 2023. *In China, the Era of Western Carmakers Is Over* [Online]. The Wall Street Journal. Available: <https://www.wsj.com/articles/rise-of-chinas-ev-makers-puts-end-to-wests-local-dominance-775d0811> [Accessed August 22, 2023].
- LAVENEX, S. 2014. The power of functionalist extension: how EU rules travel. *Journal of European Public Policy*, 21, 885-903.
- MAHONEY, J. & BARRENECHEA, R. 2019. The logic of counterfactual analysis in case-study explanation. *The British Journal of Sociology*, 70, 306-338.
- MCDONALD, J. 2009. *China surpasses US in 2009 auto sales* [Online]. NBC News. Available: <https://www.nbcnews.com/id/wbna33288846> [Accessed August 22, 2023].
- MEUNIER, S. & NICOLAÏDIS, K. 2006. The European Union as a conflicted trade power. *Journal of European Public Policy*, 13, 906-925.
- MEYER, N. 2014. The Political Economy of Standards and Standard-Setting Processes. *PIK - Praxis der Informationsverarbeitung und Kommunikation*, 37.
- MINISTRY OF FINANCE OF THE PEOPLE'S REPUBLIC OF CHINA 2009. 关于印发《汽车摩托车下乡操作细则》的通知 (trad. *Notice on Printing and Distributing the "Operation Rules for Cars and Motorcycles Going to the Countryside"*). Beijing. Available: https://www.gov.cn/gzdt/2009-06/10/content_1336981.htm [Accessed August 22, 2023]
- MORGERA, E. & KULOVESI, K. 2020. Environmental Law. In: BARNARD, C. & PEERS, S. (eds.) *European Union Law*. 3rd ed. Oxford: Oxford University Press.
- NEWMAN, A. L. & POSNER, E. 2015. Putting the EU in its place: policy strategies and the global regulatory context. *Journal of European Public Policy*, 22, 1316-1335.
- OPLETAL, J. 2023. *MIIT confirms that the 6b emission standard will take effect on July 1 in China, exception for RDE-compliant vehicles* [Online]. CarNewsChina.com. Available: <https://carnewschina.com/2023/05/09/miit-confirms-that-the-6b-emission-standard-will-take-effect-on-july-1-in-china/> [Accessed July 20, 2023].
- PAVLÍNEK, P. 2012. The impact of the 2008–2009 crisis on the automotive industry: global trends and firm-level effects in Central Europe. *European Urban and Regional Studies*, 22, 20-40.
- PAWLICKI, P. & LUO, S. 2017. China's cars and parts: development of an industry and strategic focus on Europe. In: DRAHOKOUPIL, J. (ed.) *Chinese investment in Europe: corporate strategies and labour relations*. Brussels: ETUI.
- POSANER, J., COKELAERE, H., GAVIN, G. & VON DER BURCHARD, H. 2023. *Germany's effort to save the combustion engine gains allies* [Online]. Politico. Available: <https://www.politico.eu/article/germany-czechia-italy-2035-eu-combustion-engine-ban-gains-allies/> [Accessed September 21, 2023]

- PUTNAM, R. D. 1988. Diplomacy and Domestic Politics: The Logic of Two-Level Games. *International Organization*, 42, 427-460.
- RAUSTIALA, K. & VICTOR, D. G. 2004. The Regime Complex for Plant Genetic Resources. *International Organization*, 58.
- 'Regulation (EC) of the European Parliament and of the Council (EC) 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information' (2007), *Official Journal* L171, 1-16.
- REITERER, M. 2016. Forum Shopping and the Rise of Informal Intergovernmental Institutions. In: HOFMEISTER, W. M., JAN (ed.) *Rethinking international institutions: Diplomacy and Impact on Emerging World Order*. Singapore: Konrad Adenauer Stiftung.
- ROUSSELIN, M. 2012. But Why Would They Do That? European External Governance and the Domestic Preferences of Rule Importers. *Journal of Contemporary European Research*, 8, 470-489.
- SAIKAWA, E. & URPELAINEN, J. 2014. Environmental standards as a strategy of international technology transfer. *Environmental Science & Policy*, 38, 192-206.
- SCOTT, J. & RAJAMANI, L. 2012. EU Climate Change Unilateralism. *European Journal of International Law*, 23, 469-494.
- SKEETE, J.-P. 2017. Examining the role of policy design and policy interaction in EU automotive emissions performance gaps. *Energy Policy*, 104, 373-381.
- STONE, D. 2012. Transfer and translation of policy. *Policy Studies*, 33, 483-499.
- STONE, D., PORTO DE OLIVEIRA, O. & PAL, L. A. 2020. Transnational policy transfer: the circulation of ideas, power and development models. *Policy and Society*, 39, 1-18.
- STRANGE, S. 1987. The Persistent myth of lost hegemony. *International Organization*, 41, 551-574.
- THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA 2009. 汽车产业调整和振兴规划 (trad. *Auto Industry Adjustment and Revitalization Plan*). Beijing. Available: https://www.gov.cn/zwggk/2009-03/20/content_1264324.htm [Accessed August 22, 2023]
- THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA. 2013. *Progress in China's Human Rights in 2012*. Beijing. Available: http://english.www.gov.cn/archive/white_paper/2014/08/23/content_281474982986492.htm [Accessed August 22, 2023]
- THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA. 2015. *Notice of the State Council on the Publication of "Made in China 2025"*. Beijing. Available: https://cset.georgetown.edu/wp-content/uploads/t0432_made_in_china_2025_EN.pdf [Accessed July 20, 2023]

- THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA 2016. 国务院关于印发“十三五”生态环境保护规划的通知 (trad. The State Council on printing and distributing "Thirteenth Five-Year" Ecological Environmental Protection Planning Notice) . Beijing. Available: https://www.gov.cn/zhengce/content/2016-12/05/content_5143290.htm [Accessed August 22, 2023]
- THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA. 2023. *Briefing on China's economic performance in the first quarter of 2023*. Beijing. Available: http://english.scio.gov.cn/pressroom/node_9002948.htm [Accessed August 22, 2023].
- THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA. 2017. *Report on the Work of the Government*. Beijing. Available: https://english.www.gov.cn/premier/news/202203/12/content_WS622c96d7c6d09c94e48a68ff.html [Accessed August 22, 2023]
- TRANSPORT AND ENVIRONMENT. 2018. *EU playing catch-up: China leading the race for electric car investments* [Online]. Available: <https://www.transportenvironment.org/discover/eu-playing-catch-china-leading-race-electric-car-investments/> [Accessed September 21, 2023].
- VON DER LEYEN, U. 2019. *Speech in the European Parliament Plenary Session*. Brussels.
- WENQIAN, Z. 2023. *Stricter emission standard to kick in* [Online]. China Daily. Available: <https://www.chinadaily.com.cn/a/202305/10/WS645af964a310b6054fad21c1.html> [Accessed July 20, 2023].
- WONG, J. 2019. *China's New Emissions Rules Choke Local Car Makers* [Online]. The Wall Street Journal. Available: <https://www.wsj.com/articles/chinas-new-emissions-rules-choke-local-car-makers-11560858249> [Accessed August 22, 2023].
- XINHUA NEWS AGENCY. 2021. *The Chinese Communist Party Central Committee and the State Council Publish the "National Standardization Development Outline"*. Beijing. Available: <https://cset.georgetown.edu/publication/the-chinese-communist-party-central-committee-and-the-state-council-publish-the-national-standardization-development-outline/> [Accessed August 22, 2023]
- YOUNG, A. R. 2014. Europe as a global regulator? The limits of EU influence in international food safety standards. *Journal of European Public Policy*, 21, 904-922.
- YUSHUO, Z. 2023. *China to Bring In Stricter Vehicle Emissions Standards in July, Extend Old Car Sales Period to Year's End* [Online]. Yicai Global. Available: <https://www.yicaiglobal.com/news/20230510-02-china-extends-old-car-sales-period-to-years-end-despite-stricter-emission-standards-will-take-effect-in-july> [Accessed August 22, 2023].
- ZOU, W. 2022. *Calling for Attention: Deep Analysis of Chinese Auto Report 2022* [Online]. Equal Ocean. Available: <https://equalocean.com/analysis/2022101819037> [Accessed August 22, 2023].

ZÜRN, M. 2018. *A Theory of Global Governance: Authority, Legitimacy, and Contestation*, Oxford: Oxford University Press.

VI. Summary

In an increasingly complex and interdependent world, the European Union (EU) has been progressively described as an international standard-setter. In the academic literature, conceptualising the EU as a global regulator has been possible thanks to the ongoing debate on the kind of international actor the EU is. On the one hand, for instance, authors such as Sophie Meunier and Kalypso Nicolaidis contended that trade – through an existing system of market access conditionalities - is key in making the Union a global power. On the other hand, and building on Meunier's and Nicolaidis' work, Chad Damro discussed the existence of a Market Power Europe (MPE). In Damro's opinion, the role of the EU as a global regulator is not just the consequence of conditionality clauses but stems more generally from the sheer size of the Single Market and the Union's regulatory capacity, i.e., the EU's consolidated expertise in the field of economic and social regulations. In some cases, the MPE concept can correspond to the unintentional outcome of a purely domestic policy. By way of illustration, environmental policy is undoubtedly an area which has been significantly studied by the scholarship on the EU's global regulatory power. As a matter of fact, since the 1990s, the Union progressively developed the awareness that it could support the implementation of international agreements on climate change, chiefly the United Nations Framework Convention on Climate Change (UNFCCC), by extending its own (ambitious) environmental legislation to third countries' actors through its market power through a process of externalisation. The latter refers to the extension of the legal effects of domestic laws to (mainly) foreign actors and beyond national borders, when there is, at least, a minimal link to the country of reference.

However, a weakness seems to appear in the literature. In fact, no authors - neither Chad Damro himself nor the scholars who have used MPE to analyse the EU's action in some policy areas – have consistently engaged with the limits of the EU regulatory power in the international economy. The scholarship seems to give only static pictures of such power in different sectors, among which environmental policy. It does not offer an evolutionary analysis of how Market Power Europe changes when the underlying conditions, chiefly the centrality of the EU Market, change with regard to the rise of other countries. Some authors, such as Alasdair Young and Anu Bradford have tried to expand the scope of the analysis, by including features related to non-EU actors. Yet, the results are still limited.

Accordingly, the current research aims to better understand the limits of the EU's power as a global regulator, chiefly by looking at what could happen to Market Power Europe when the Union loses its salience in an industry. Therefore, the focus is on the case of vehicle exhaust emissions standards, a policy issue in which the EU historically played an important role in uploading its preferences to international fora such as the United Nations Economic Commission for Europe. More specifically, this research looks at the adoption of the new China 6b standard as a deviation from the Euro

Standards, which Beijing has historically used as a reference point for its vehicle emissions legislation. Thus, the research question tackled in this study is: How has the loss of the EU's dominance in the automotive industry influenced China's deviation from Euro standards with the adoption of China 6b? Also, the response to this question will entail addressing two sub-questions: How is the green transition influencing power relations in international standard-setting? How is the automotive private sector significant in this shift of power?

The main findings of this research are that China's overtaking of the EU in the automotive industry has incentivised Beijing to make this sector a pillar industry for the country's development, thus pushing the central government to be more ambitious in standard setting. In this process, the fight against climate change has created a perfect window of opportunity for China's specialisation in the production of New Energy Vehicles (NEVs). Therefore, the deviation from Euro standards with the implementation of China 6b has been instrumental in consolidating the Chinese leadership in the NEV segment. Moreover, the responsiveness of the Chinese private sector to the government's inputs has been pivotal in ensuring the smooth transition to new indigenous regulations.

To reach these conclusions, the first step of this research has been to build the theoretical framework within which the analysis has been carried out. Since the end of the Cold War, the collapse of the Soviet Union made possible greater interaction, economic and political, between the Western and ex-Soviet blocs. These dynamics allowed authors such as Michael Zürn to study international relations under the lens of global governance, namely "the exercise of authority across national borders as well as consented norms and rules beyond the nation-state, both of them justified with reference to common goods or transnational problems" (Zürn 2018). Global governance through standard-setting became particularly fashionable as it seemed to give an answer to the multitude of global issues requiring coordination among States. However, being international fora and standard-setting organisations arenas of power, they created not only winners but also losers. Hence, these venues of power experienced a high level of political fragmentation as dissatisfied actors adopted alternative strategies such as forum shopping and the externalisation of domestic legislation. Both phenomena are an expression of intergovernmentalism in International Relations since they have been used by dissatisfied States with the scope of promoting their own interest within international institutions.

Another important element to set the theoretical framework is the concept of the EU as a global environmental regulator. Indeed, among all policy areas in which the European Union has the power to legislate, environmental policy is undoubtedly the one where the linkage between internal and external regulation has been particularly salient. In this regard, car exhaust emissions standards (so-called Euro Standards) represent one of the first policy instruments of the Union that gained international salience. This has been possible thanks to the strong position of the European automotive market in the international economy, as well as the strong collaboration between European regulators and the United Nations Economic Commission for Europe (UN ECE). This is why, although Euro Standards have become increasingly stricter over time, several third countries – among which China – have adopted them as a benchmark for national legislation. However, all that

glitters is not gold. While it is true that the Euro standards are a good example of how the EU exercises its market power, it is also true that the conditions which led to the success of these standards seem to be gradually vanishing.

In fact, with the launch of the Made in China 2025 industrial strategy, China can be considered the main challenger to Western-driven standard-setting. The strategy aims to develop the awareness that greater intervention in international standard-setting benefits the country's power of influence. With regard to the automotive industry, the Made in China 2025 strategy fostered the development of the NEVs segment, making the country a leader in the field. In 2016, Beijing even adopted the so-called China 6b standard, which represents the country's first indigenous standard in the sector and is even more stringent than the current Euro 6 norms. Interestingly, China 6b has such low emission standards that NEVs are the only viable production option for car manufacturers, thus favouring Chinese firms.

When it comes to methodology, this research applies a theory-building process tracing to focus on the causal mechanism underpinning the adoption of China 6b. As conceptualised by Beach and Pedersen this process tracing approach “uses a structured analysis [...] to detect a plausible hypothetical causal mechanism whereby X is linked with Y” (Beach and Pedersen 2014). Ontologically, however, this research slightly diverges from Beach and Pedersen's original conceptualisation of theory-building process tracing as far as it concerns their interpretation of causal mechanisms within a middle-range theory. In fact, this study adheres to Tuukka Kaidesoja's view that setting temporal boundaries while building a middle-range theory on causal mechanisms is too restrictive. In today's world, temporal linearity and non-parallel sequences of events are rare to find, as social phenomena are increasingly interrelated. Causal mechanisms must be interpreted as a series of events which are not necessarily linear. Therefore, the alternative theory-building process tracing approach used aims at building a middle-range theory structured on the following prerequisites: a conceptual framework about social phenomena, a mechanism schema, and a cluster of mechanism-based explanations.

Finally, the process tracing performed confirms a relation between China's overtaking of the leadership in the automotive industry and the deviation from Euro Standards. The establishment of this causal mechanism has been powered by Beijing's intention of challenging the EU in the race towards the electrification of mobility. By generalising such findings, it seems clear that - at least in developing countries - the promotion of industrial policies, associated with a long-term view of the country's international standing can lead, in the medium term, to the emergence of indigenous standards. This phenomenon stems from a desire to break free from the influence of industrialised countries. Instead of assuming a world in which, among industrialised countries, the Union is the largest consumer market, the EU's power of influence theories should thus consider and engage with the possibility for other developing countries or economic areas to reach the same level of industrialisation.