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Monetary Policy and Wage-Bargaining in the Eurozone: An Epistemological Break?

An Analysis from the Perspective of the ECB

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Abstract

This paper aims to show how, upon the introduction of EMU both structural and ideological factors have concurred to shape ECB's policy stance to envision no need to maintain an active dialogue with national social partners and a blind faith in their capacity/will to constantly pursue wage moderation in parallel with the ECB's guarantee of price stability. A range of research methods is adopted: game theory is used to unpack the dynamics of coordination between central bank and wage-setters. A brief examination of coalitional configurations within the ECB Governing Council and an extensive qualitative text analysis of presidents' speeches and interviews informs the ultimate elaboration of a grounded theory. I will thus define and progressively identify the occurrence of a drastic post-EMU alteration, an epistemological break, in the relationship between monetary policy and wage-bargaining, with the ECB strongly putting forward the conservative idea of a sharp separation between the two and no necessity for ex ante coordination. Such sharp separation can be seen to have concurred to dangerously expose smaller, institutionally weaker peripheral countries to the challenge of maintaining wage moderation even after EMU accession and with a loosened link to monetary authorities. These internal imbalances have then played a pivotal role in the build-up to the European sovereign debt crisis.

Keywords: Monetary policy, wage-bargaining, Eurozone, ECB

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1. Introduction

The progressive implementation of the European Monetary Union has generated a large set of economic and political implications: introducing a common currency has entailed the relinquishment of national sovereignty over some key economic policy-making tools and, in parallel, it required designing and then adapting to a new, supranational architecture aimed at supporting the process of further integration. Some crucial weaknesses have been exposed by the recent sovereign debt crisis. The in-built financial fragility of a monetary union which lacks the necessary degree of political integration has materialised dramatically in that occasion (De Grauwe 2018) and has ever since received ample political and academic attention.

However, there are also more profound, structural factors which have silently underpinned the progressive generation of internal disequilibria within such political economic conglomeration and that deserve equal attention. These are largely rooted in the heterogeneity of European economies and polities, the path-dependence of relationships between national social actors and structural rigidities of labour markets.

1.1 Why it is important

In order to gain a sound understanding of such aspects and investigate deeper into the origins of the crisis, it is important to start by acknowledging the incompleteness of a project whose soundness relied heavily on paralleling centralised monetary policy and (potential) centralised fiscal policy with flexibility in the labour market. Such flexibility, along with labour mobility, was considered by the renown OCA theory (Mundell 1961) as a key adjustment channel for countries facing asymmetric shocks, especially in a monetary union that has historically struggled to achieve some degree of fiscal integration.

Oddly enough, relatively less attention has been devoted to analysing the dynamics of interaction between centralised monetary policy and the highly heterogeneous labour markets of EMU's members, (Soskice and Iversen 2001). The creation of EMU has necessarily led to an alteration of the mechanisms of coordination between (now centralised) monetary policy and (decentralised) wage-setting, leading to significant and heterogeneous consequences in terms of competitiveness, wage inflation and trade/current account deficit levels within the union (Kilponen 1999). Such imbalances acquired remarkable weight given the absence of the nominal exchange rate channel of adjustment implied by a currency union, allowing for uncontrolled deficit growth in peripheral countries and feeding into capital flights prompted by the global financial crisis (Johnston, 2016).

Therefore, analysing how coordination and cooperation between central banks and wage-bargaining institutions occurs constitutes a key to understanding how monetary policy is transmitted to the real economy and can particularly help explaining the generation of internal imbalances within a monetary union.

1.2 The relationship between monetary policy and wage bargaining

What is the exact link between monetary policy and wage-setting that makes it so crucial for the performance of a country and ultimately a monetary union? Within a national economy, inflation and price competitiveness are largely determined by aggregate wage growth; aggregate inflation then influences international competitiveness through the real exchange rate channel.

The economic performance of a country in a monetary union thus hinges crucially on its capacity to exercise wage moderation: such moderation however is often the object of a "collective action problem" (Olson 1965) which involves labour union's incentives to restrain wage demands in favour of aggregate stability (Calmfors and Driffil 1988). On the other hand, a key factor in determining appetite for wage moderation, is constituted by the attitude of the central bank towards inflation and its proneness to reward stability-oriented wages with expansionary monetary policy. If labour unions know that the central bank is highly inflation-averse (conservative), their incentives to restrain wages decline severely as there would be no perspective growth-boosting monetary policy to offset the political costs of convincing workers to accept lower nominal wages. The constitutional design of a central bank (and thus the specifics of its response function) and the features of the labour market, with the complex set of interests involved, define the general rules underlying these mechanisms of coordination/cooperation. Last but not least, the modalities and the direction towards which the ECB wields its ideational power (Carstensen and Schimdt 2016) as a leading economic institution have a pivotal role in shaping the final outcomes of this strategic game.

1.3 The puzzle

Between 1992 and 1999, the wide emergence of national inflation-averse central banks and Maastricht conditionality combined to strengthen incentives for wage moderation through widespread social pacts: a sort of mutual understanding (or rather compromise), based on common interests was developed between national central banks and labour unions leading to general convergence in terms of low interest rates and wage growth (Hanckè 2013). With the introduction of EMU, this mosaic of many distinct realities was unavoidably disrupted. This entailed shifting the interactions between monetary policy and wage-setting on a higher ground: on the one hand, with a single monetary institution, the ECB, now having to deal with the complex heterogeneity of several, distinct labour markets, on the other hand with European labour unions torn between pursuing individualistic national interests and the need to coordinate at a European level in order to facilitate the (often impalpable and long-term) attainment of aggregate outcomes.

Now, given that the very same national central banks governors suddenly found themselves sitting at the table of the ECB's Governing Council, somewhat bridging such discrepancy between the national and the supranational economic dimensions, did their attitude towards monetary policy and wage-targeting change at all?

Johnston (2016) indicated the early 2000's as the beginning of the progressive divergence in competitiveness and economic performance within the Eurozone which ultimately underpinned the following sovereign debt crisis.

The interesting question, which I place at the core of this dissertation, is the following: between 1999 and 2007, can we find the origin of the growing failure in coordination/cooperation between monetary policy and wage-setting in the EMU, merely among the structural implications of a single policy stance now having to accommodate for a whole heterogeneous set of different countries with different labour markets and social dynamics?

Or, assuming there was no major economic paradigm shift, were such developments underpinned by a more profound "epistemological break" (Bachelard 1938) in the way monetary policy was conceived (with respect to wage developments), once shifted on a supranational level and contextualised within the structure of an ECB whose design was so much influenced by political and ideological factors?

The general concept of epistemological break as first developed by Bachelard can be defined as a moment of rupture within the process of building knowledge. This rupture separates what was previously believed, from what science has now proven to be exact. In a way, reaching an epistemological break means overcoming the unconscious obstacles to thought posed by knowledge itself (Cahiers pour l'Analyse). Adapted to our context, the epistemological break could potentially be identified in a "new way" to regard wage developments within the design of monetary policy, once transposed at a supranational level, in the hands of the ECB. A new normal which is clearly distinct from what was regarded as standard in the years between the Maastricht Treaty and the introduction of the single currency.

While these two explanations are subtly intertwined and can be seen as complementary, on the one hand the former presupposes an ultimate structural incompatibility of EMU countries to be joined under the single roof of a common currency, something which has been largely explored by the literature and built upon OCA theory. On the other hand, the latter develops from the idea that this change was in a sense the result of a voluntary choice: this opens up to less common analyses which combine insights into interest representation and the internal mechanisms of decision-making of the ECB with the role of ideological factors and the power of ideas.

1.4 Outline and research approach

The remainder of this paper is mainly divided into four sections. I will start by briefly reviewing the existing literature on the interactions between wage bargaining and monetary policy within a currency union, in order to better position my research question within a defined academic context. Subsequently, I will lay out the empirical evidence underlying the claim that the introduction of EMU altered the very same dynamics of interaction: this will be done by relying on data on interest rates, wages and inflation allowing me to draw a comparison between pre- and post-EMU trends. This data will then be framed within a game-theoretical model of the coordination/cooperation between monetary policy and wage-setting institutions *a la* Dullien (2004): this will help provide both a logical and visual representation of the estimated impact of the introduction of EMU. In this context, Germany, Italy and the Netherlands will be used as country cases.

The third section then gets to the core of this research, shifting perspective to that of the ECB, focusing on the monetary policy decision-making architecture and exploring the representation of national interests within potential coalitional dynamics in the Governing Council: this will serve to determine “who” most likely drives ECB’s decisions.

As for the content of its decisions, communication constitutes one of the key instruments used by the ECB not only to maintain its credibility and legitimacy vis-à-vis political audiences and the broader public, but importantly also to transmit its policy stance to economic agents, hoping to steer their actions in the way they think it would best serve the attainment of aggregate outcomes. Studying the ECB's main lines of communication and complementing it with an understanding of how it wields its ideational power to corroborate the messages can thus help us to at least partly back-solve the puzzle. Indeed, this can eventually help us derive important insights into the role that wage developments play in the design of monetary policy.

In the last section, I will therefore conduct a thorough analysis of ECB's presidents' speeches and official interviews released between 1999 and 2007, extracting all the excerpts mentioning wage-targeting and price developments. This research plan starts from the communication of internal decisions with the aim to trace all the way back to the general tenets underpinning such decisions, therefore the best suited approach is indeed offered by a process of inductive reasoning. The text analysis will be thus framed along the qualitative research methods criteria of so-called "grounded theory" (Glaser and Strauss 1967), the aim being to estimate an underlying rationale shaping the ECB interest rate-setting with respect to wage developments in the Eurozone. In this sense, drawing a general theory which has its grounds on a coherent line of reasoning is not only a useful research tool, but the ultimate goal itself.

The novelty of my approach is to be found mainly in the adoption of an ECB perspective when trying to unpack the internal monetary policy decisional mechanisms and the transposition of domestic interests at a supranational level. My approach also differs from other contributions in that it analyses the ECB's main communicative tools to derive a coherent estimation of the rationale which drives monetary policy decisions with respect to wage developments in the Eurozone. As a result, my argument will contain both structural and more ideological, mandate-based aspects.

2. Theoretical framework and literature review

Dealing with this subject matter implies considering authors that placed their research focus on the different actors which autonomously shape monetary policy (central banks and then ECB) and wage-bargaining (national labour unions) but then jointly determine aggregate outcomes in terms of competitiveness, unemployment and labour market growth (Iversen 1998). Franzese and Hall (2000) stress how the transmission of monetary policy involves a signalling process between the central bank and economic actors. The effectiveness of such process is said to depend in turn on the broader organization of the political economy and specifically on the coordination of wage-bargaining. On the other hand, the behaviour of individual wage-setters is significantly influenced by the perceived preferences of monetary authorities in terms of their degree of conservativeness (Lippi 2003).

With the aim of drawing a comprehensive theoretical framework, the following paragraphs will separately focus on the incentives and the tools that the two sides have, gleaning from the extensive literature on the topics.

2.1 Labour unions

2.1.1 Effects of centralisation/fragmentation of wage-bargaining institutions

When considering the impact of wage-bargaining and wage-setting on the aggregate labour market performance of a country, it is important to understand how this is the result of the behaviour of (often) several, distinct labour unions, each with their own specific characteristics and trade-offs between privileging the interests of their own sector, or rather the overall economy's sustainable growth through wage moderation. In this context, several authors have researched into how the degree of centralisation of wage-bargaining and the nature of the sector in question influence the incentives of labour unions.

On the one hand, higher centralisation is said to increase a union's awareness of its weight in the generation of wage inflation: in this regard, Calmfors and Driffil (1988) indicate a high degree of centralisation as ideal for the sustainability of aggregate growth through wage moderation, while a low degree of centralisation reduces significantly the monopoly power of each union (and their capacity to influence aggregate outcomes). A medium level of centralisation is said to yield the worst result, with neither effects applying.

With regards to sectorial interests: Hanckè and Johnston (2009) maintain that exposed sectors (mainly manufacturing) have greater interest in moderating wage levels in order to preserve international competitiveness as compared to sheltered sectors and that aggregate wage moderation is more likely where a coordination mechanism among exposed and sheltered sectors (services) is in place.

Hein (2002) also mentions the importance of both "horizontal and vertical coordination in wage bargaining" (p.301) while stressing how a central bank's degree of independence and conservativeness interacts with such factors to determine real economy outcomes. I will now turn to these aspects.

2.1.2 Incentives from Central Bank degree of conservativeness and independence

Cuckiermann and Lippi (1999) find that, assuming unions care about inflation, the degree of conservativeness of a central bank influences wage-setting decisions by changing union's perception of the inflationary weight of their individual actions. This effectively constitutes a determinant of Franzese and Hall's (1998) signalling game and has led to contrasting conclusion within the literature. Barro and Gordon's seminal paper (1983) maintains that delegation to an independent, "conservative" central bank reduces inefficient inflationary bias. Contrarily Guzzo and Velasco (1999) argue that the less conservative the central bank, the greater the inflationary cost of wage demands, thus the more moderation resulting in both high output and low inflation.

In the case of a currency union, such as EMU, the dramatic disjuncture of monetary policy and wage-bargaining increases the importance of the specifics of the monetary stance for unions' behaviour in an increasingly fragmented wage-setting scenario (Perez 2002; Iversen and Soskice 2001). The same disjuncture is commonly seen as producing incentives for less wage moderation, especially once passed the threshold of Maastrich's conditionality and for those countries possessing weaker institutional capacity to constrain sheltered sectors' demands (Johnston 2016). Especially within a currency union, the features of the wage-setting scenario, in terms of (non) atomism play a key role in determining unions capacity to internalize inflationary bias, thus influencing the outcomes of potential collective action problems (Gnocchi 2009).

2.2 ECB

2.2.1 Internal decision-making dynamics

An important step towards understanding the orientation of the ECB's strategy is to identify whether central banks' governors sitting at the Governing Council interpret their voting duties as totally detached from the specific interests of their countries of origin (as the ECB's statute prescribes), or whether national dynamics end up having a strong influence on voting behaviour.

Differently from the Federal Reserve or the Bundesbank (prior to the creation of EMU), the ECB does not publicly release the minutes of their Governing Council meetings: this greatly complicates the task of identifying particular attitudes of Council members. Nevertheless, a number of studies has attempted to detect domestic biases in the voting behaviour of governors: authors like Berger and De Haan (2002), Meade and Sheets (2002;2005) draw an interesting parallel between divergences in economic performance among US and German federal states and EMU's member states, while analysing the voting behaviour (which was made public) of federal representatives sitting respectively at the FOMC and the Deutsche Bundesbank. As they identify a clear bias originating from different federal macroeconomic trends, they envision a significant potential for similar behaviour within the ECB's Governing Council, given that Eurozone countries also display a certain degree of heterogeneity in economic performance (Aksoy et al. 2002). This observation is somewhat compounded by the fact that, especially during the 1999-2004 sub-period, smaller, peripheral countries (whose macroeconomic performance and thus preferences were consistently different from core, northern countries, (Berger and De Haan 2002)) were placed on equal footing with weightier member states by means of the one-country-one-vote principle.

Some other authors have pushed this type of insight even further to develop particular models aimed at estimating the impact of domestic developments on the preferences of central banks governors, specifically within the ECB. Among these, Cancelo et al. (2011) adopted a two-staged model which identified a significant impact of national developments on Governing Council members, relying on the assumption that differences in governors' reaction functions' preferences regarding interest rate are only the result of nationalistic biases.

Similarly, Hayo and Méon (2013) compare hypothetical scenarios where all governors pursue either national or EU-wide objectives and find that results from the latter resemble much more the observed Euro area interest rate.

On the other hand, all of the authors cited above and more (e.g. Heinemann and Huefner 2004; Eijffinger and Geraats 2006; Bindseil 2001) adopt the reasonable assumption that, at least, the 6 members of the Executive Board have a purely EU-wide view. I will do the same in my analysis.

2.2.2 The ECB's ideational power

Beyond the specifics of the internal decisional process, externally the ECB needs to ensure that it maintains the necessary degree of credibility and legitimacy for its monetary policy stance to be effective and lead to the desired aggregate outcomes. The concept of legitimacy is particularly important in the context of my analysis as it hinges on the capabilities of the ECB, as a supranational institution, to be widely recognised as being appropriately suited to exercise specific powers (Jean Monnet Program).

Why is it important in the context of the interactions between monetary policy and wage-setting? Because once EMU was formed, and as a consequence the single national dimensions of dialogue and coordination between central banks and wage setters ceased to exist, the ECB emerged as the one entity *super partes* which had to dictate a single line in terms of desired wage-setting behaviour for the good of the whole union. To do this, legitimacy is of paramount importance and in particular one dimension of it which I will now focus on: ideational power.

Ideas feed into the process of building legitimacy through the assessment of how the actions taken under a particular system are justified in terms of the beliefs, values and normative standards that people hold (Beetham 1991). Ideational power can then be defined as the capacity of actors to influence other actors' normative and cognitive beliefs through the use of ideational elements (Carsten and Schmidt 2016). The same authors (2017) elaborated an interesting distinction between three different structures which connect ideas with power: These are persuasive power **through** ideas via discourse, coercive power **over** ideas and discourse, and structural or institutional power **in** ideas and discourse.

Constructivist literature has produced in-depth analyses of the linkages between ideational power and legitimacy: the concepts of *input*, *output* and *throughput* help explaining the different modalities through which discursive dynamics of legitimation unfold (Matthijs and Blyth 2017).

These distinctions will be unpacked more in depth in the concluding section where they will serve as valid analytical instrument to support some aspects of the grounded theory.

In conclusion, ideas should be made analytically distinct from interests as drivers of policy (Campbell 1998). Such key differentiation finds a compelling application in our analysis: while we have seen how the literature weighs the impact of individualistic <u>interests</u> within the internal decision-making process, economic <u>ideas</u> are expected to have a key role not only in shaping the underlying orientation of ECB's policy stance, but also importantly the narrative which is used to communicate and justify it. The next section lays the foundations of our grounded theory: an empirical analysis will assess the implications of the introduction of EMU on the incentives of the strategic game between central bank and wage-setters.

Then, precisely building on the insightful distinction between drivers of policy, sections 4 and 5 of this paper will respectively briefly examine the hypothesis that nationalistic interests may seize determinant agenda power in the ECB Governing Council and integrate the role of ideational power within the broader elaboration of a grounded theory.

3. A game-theoretical analysis of EMU's impact

We have seen how aggregate outcomes in terms of inflation and unemployment depend crucially on the complex interactions between the structural features of labour markets and the attitude of a central bank towards the pursuit of price stability (Hayo 1998). Within this coordination game, the creation of a currency area, such as EMU, increases significantly the distance between the players, affecting their respective payoffs.

The aim of this section is to establish, through empirical demonstration, the foundation of my research, which is that the introduction of EMU has indeed caused a significant alteration of the above-mentioned dynamics of coordination. This will allow me to draw important implications regarding the ECB's monetary policy perspective from the angle of wage-targeting, which I will then take further in the following sections.

I have so far defined the interactions between monetary policy and wage-setting as unfolding along the lines of a strategic game between unions and the CB. Dullien (2004) elaborated an insightful gametheoretical model which clearly schematises the interactions between the main actors involved. Labour unions are the first-movers in this coordination game with CB responding with either restrictive or expansionary monetary policy: costs and benefits of each move are reflected in the different pay-offs, where wage moderation and low interests provide for the optimal equilibrium. This is because the economy would be expanding while keeping inflation in check by moderating wage growth.

I will now adopt Dullien's game-theoretical model as a framework to test the empirical concreteness of the post-EMU shift away from sound coordination. The following countries will be used as short case studies: Germany, Italy, the Netherlands. For these countries I take some key indicators (interest rates before EMU, ECB interest rates, wage growth and inflation) from the Federal Reserve of Saint Louis online archive (FRED), an extremely comprehensive database which groups figures from all major international economic institutions (IMF, OECD, World Bank etc.). Case study countries are chosen among the bigger EU member states with widely differing economic and social structures. I then look out for peculiar correlations between trends and relate them to Dullien's model. At the end I propose a graphical representation of the game-theoretical framework as related to the country cases examined.

3.1 Netherlands

The 1980s and 1990s saw the introduction of remarkable legal actions in the Dutch wage-bargaining framework, with public sector wage bargaining rights and conditions being brought in line with private ones: this initiated a public sector "catch-up" wage policy with the private sector (van het Kaar 1997) which led to constantly high wage growth in the sheltered sector between 1992 and 1999. At the same time, while still moderately low, growth in wages in manufacturing did not display the same trend of sharp restraint as in Germany over the same period. At the same time, the Dutch central bank implemented expansionary monetary policy resulting in stagnating inflation levels, however constantly higher than in Germany. Such combination could be partly linked to a suboptimal gametheoretical combination of "no wage restraint + expansionary monetary policy".

After the creation of EMU, Holland could rely on a long tradition of national wage pacts which eventually managed to impose wage ceilings on all sectors once wage inflation in the public sector threatened to turn into a national wage-price spiral (Hemerijck et al. 2000). As a result, public sector wage inflation pressure was largely restrained as we can see from constantly lower sheltered-exposed differentials in *figure 1.a* (*appendix 1*). A period of constant aggregate wage moderation was inaugurated as shown by the purple line's trend in *figure 1.b*. As compared to the steep decrease in interest rates between 1992 and 1999, the ECB's interest rate's trend appears much flatter, implying a relatively less expansionary stance (*figure1.b*). As a consequence, we could interpret the introduction of EMU as a change from a combination of "no wage restraint + expansionary monetary policy" to another suboptimal combination of "wage restraint + (relatively) restrictive monetary policy".

3.2 Italy

Between 1992 and 1999, As stressed by Negrelli and Pulignano (ETUI 2010), the evolution of Italian social pacts was in line with the changing nature of neo-corporatist agreements like in many other countries in Europe: this resulted in constant wage moderation in both exposed and sheltered sectors as shown by the combination of *figure 1.a* and *1.c* (declining manufacturing wage growth and negative sheltered-exposed differential except for 1996 and 1997). At the same time the blue line in *figure 1.c* shows a clear decline in interest rates over the same period, in line with the general European trend.

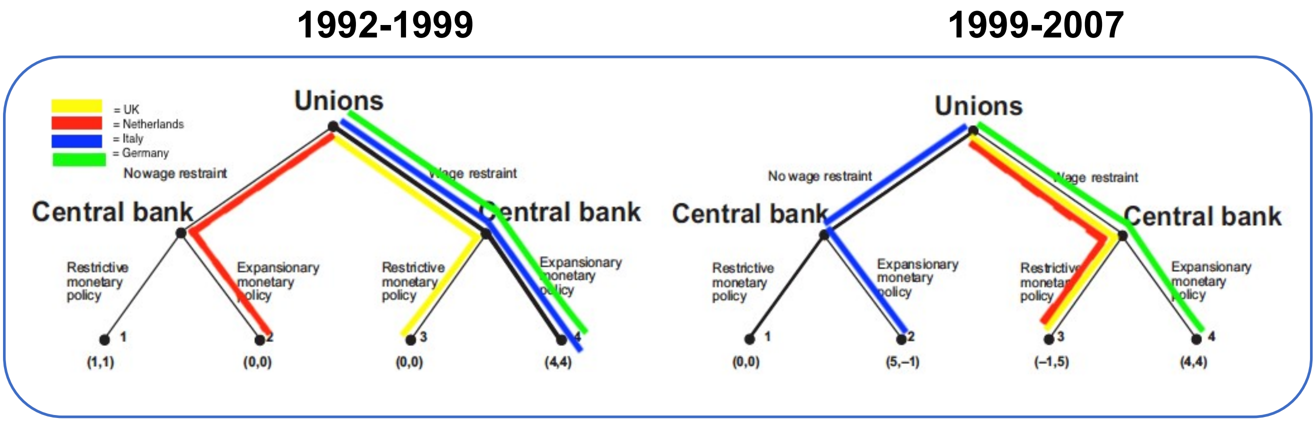
During the 1999-2007 period, however, relative stagnation in manufacturing wage was paralleled by extensive sheltered sector wage growth (as shown by constantly positive sheltered-exposed differential in *figure 1.a*) mainly due to the end of Maastricht conditionality and the absence of adequate corporatist structures to tame such pressures (Johnston 2016). As competitiveness and current accounts were progressively deteriorating, the ECB's interest rate trend appears as relatively expansionary with respect to the weak wage moderation exercised in Italy. We can thus think of the Italian scenario as a switch from an optimal "wage restraint + expansionary monetary policy" combination to a suboptimal "no wage restraint + expansionary monetary policy".

3.3 Germany

Although Johnston (2016) indicates both consistent current account deficits and a trend of constant growth in the German sheltered sector (+1.4% a year) between 1992 and 1998, *figure 1.d* shows how the rate of wage growth in manufacturing declined steadily during the same period, adjusting aggregate wage growth downwards. This is corroborated by the fact that the German sheltered-exposed differential during that period remained constantly below/around zero (*figure 1.a*). At the same time, interest rates were also constantly declining together with inflation, thus providing for the ideal combination of wage restraint and expansionary monetary policy envisioned by Dullien's pre-EMU model. Following the introduction of the Euro, Germany implemented increased coordination and centralisation in public sector (sheltered) wage-bargaining resulting in increased effectiveness in moderating wages at the aggregate level and consequent stagnation in their level between 1999 and 2007 (Driffil 2006). What is truly interesting to observe in the graph is how the discount rate for Euro area seems to be mirroring wage growth trends in German manufacturing sector: the green line appears to be responding perfectly in parallel to the purple one as it displays either and upward, stagnating, or downward trend, with a lag which could coincide with the idea of CB as second-mover in the coordination game. As a whole, interest rates appear to be rather constant over the 2002-2007 period with no sharp expansionary trend. Such data seems to point towards a scenario whereby Germany was able to largely maintain the optimal coordination outcome throughout the introduction of the Euro.

3.4 UK

Additionally, as term of comparison, I have also looked at the UK (*figure 1.e*) which obviously is not part of the EMU project, but can however provide some useful insights. In this case, somehow predictably, no discernible change in wage-monetary policy coordination can be identified upon the introduction of the Euro: from 1992 to 2007 an equilibrium of stagnating (manufacturing) wage levels and interest rates is paralleled by declining and then stable inflation. We can thus represent this as a constant "wage restraint + restrictive monetary policy" combination.



3.5 Research implications

How do we explain the change in pay-offs?

- From the point of view of **unions**, incentives to exert wage restraints declined due to the increased decentralization (lower weight in ECB's response function) aggravated by the severe fragmentation of wage bargaining institutions throughout EMU (Calmfors, Driffil 1988);
- on the other hand, the highly conservative, narrow mandate of the newly designed **ECB** and the structural need to deal with a whole set of heterogeneous member states might have provided for a remarkably lower interest in responding positively to wage restraints in a particular country. This is the aspect I will most focus on.

Given this, what wage developments does the ECB really target when it sets its monetary policy stance?

During the EMS period, there was a general orientation towards mimicking the Bundesbank coordination game with the biggest labour union in Germany (IG Metal), (Hanckè 2016): such bias might have survived the creation of the Euro, with the ECB's "German" design orienting the response function lens on a union which now represents a much smaller size of the (European) economy. Persistently targeting a single labour union which represents an exposed sector of a single country, however relatively big, would most likely imply responding to probable wage restraints with expansionary policy: at the aggregate level, however, this would likely mean constantly strong wage-inflation pressure. Tracing inflation levels across the creation of EMU, however, does not show such remarkable increase in price level at the aggregate (*figure 1.f*).

The reason for this might be that the strong conservative bias of the ECB is likely to have played a role in restraining EMU monetary policy in terms of boldness: as a result, at least on a theoretical level, it is rational to think of a monetary policy stance which would possibly be still keeping Germany as key benchmark, but with a level of even lower/milder boldness due to the need to take into account the risk for wage inflation at the aggregate EMU level. Such solution, however, risks being a compromise which does not "satisfy" anyone, as countries which manage to exert strong wage moderation would find themselves facing a monetary policy which is (relatively) too restrictive while the opposite would work for countries which were allowing higher wage growth.

Taking account of these hypothetical implications entails facing the following two, interrelated questions:

- How have the interests of individual countries (such as Italy and the Netherlands) to perpetuate their pre-EMU internal equilibria played out once represented by national central banks' governors sitting at a supranational table (ECB Governing Council)?
- Has the mere introduction of a single monetary policy stance produced an epistemological break in the conceptualisation and (subsequently) operationalisation of wage-targeting within the decision-making process?

4. Unpacking ECB's monetary policy internal decision-making dynamics

I shall now proceed to analysing the decision-making mechanisms behind the ECB's monetary policy stance. The relevance of this type of insight lays in the fact that unpacking how the interests of different member states are transposed and represented at a supranational level and then identifying the driving forces that shape its monetary stance allows to take a step towards understanding whether there has been indeed an epistemological break in the coordination between monetary policy and wage-setting in the EU. More specifically, it can help getting closer to understanding whether the move away from (several individual countries') coordination between monetary and wage-setting policies was the unavoidable result of dealing with a set of heterogeneous countries; or rather something deeper, in ideological terms, sparking from the influence of the core EMU countries which largely drove the process of institution-setting, and that might have shaken the foundations of wage-targeting within a Central Bank's monetary policy evaluations.

I will now touch upon the structure of the ECB decision-making bodies responsible for determining its monetary policy and then attempt to identify who has been largely driving this process, I will then analyse some scenarios implied by potential coalitional dynamics and their influence on final outcomes.

3.1 Decision-making structure and member states interests

According to the Protocol on the Statute of the European System of Central Banks and of the ECB (ECB 1992, article 3), the ECB is responsible for defining and implementing the monetary policy of the Community. With regards to its independence in performing such tasks, article 7 (ECB 1992) clearly stresses how the exercise of the powers conferred by the Treaty/Statute should in no circumstance be influenced by any EU institution, nor national central bank or decision-making body of individual member countries. On the one hand, such degree of insulation follows the widely-agreed criteria which theoretically ensure the necessary credibility and stability underpinning efficient monetary policy-making (Alesina and Summers 1993; Blinder 2000; Goodman 1991). On the other hand, this design necessarily entails a compromise in terms of the extent to which individual member states can put forward their own interests, which has become subordinated to a EU-wide "view from the Euro tower" (Heinemann and Huefner 2004).

At the same time, the policy-makers operating within ECB's decisional bodies are representatives, more specifically national central banks governors, of each country that is a member of the European Monetary Union. It thus becomes interesting to explore how the preferences of individual countries play out once transposed onto this supranational level and whether, and how, these relate to the direction of the policy choices taken. In order to do so, I should start by briefly explaining the structure of the ECB's decision-making bodies and then address hypothetical coalitional dynamics and their implications in terms of voting power.

Article 9.3 of The ESCB's statute designated two bodies as officially responsible for defining and implementing the Union's monetary policy: these are the Executive Board, which is made up of the President of the ECB, the Vice-President and 4 other members and the Governing Council, composed by the Executive Board and all the governors of the national central banks. Decisions regarding monetary policy are taken by the Governing Council and then implemented and constantly supervised by the Executive Board. Such decisions are taken with voting procedures based on a simple majority rule (Article 10.2): this was legitimated by a mere one-country-one-vote principle, during a first subsection of the period of interest for this dissertation (1999-2004), which was subsequently re-elaborated to feature a rotational voting structure giving more weight to (economically) more important countries (2004-2007). We can thus envision how such community decisional body, constituted by representatives of a highly heterogeneous set of countries, enshrines an intrinsic tension between political weight (within voting procedures) and economic weight (in terms of GDP). This contrast is of great importance specifically because it embodies the challenge of reconciling individualistic interests with the need to have a systemic, EU-wide, policy stance.

I shall now attempt to understand whether the decision-making structure of the ECB is prone to allow for the emergence and predominance of particularistic interests or rather a EU-wide approach tends to prevail. Given that a majority rule is at the basis of the ECB's monetary policy decision-making system, an exploration of potential internal coalitional dynamics can be insightful as coalitions can be seen as more realistically able to further the specific interests of countries with similar characteristics/preferences. Analysing the trade-offs between individual preferences and collective goals can help me understand the normative policy context in which ECB's monetary policy decisions are taken and then further guide me in identifying the role of wage-targeting within EMU's regime.

Taking into consideration the first sub-period (1999-2004) of my interest, the existence of a simple one-country-one-vote principle ruling decision-making within the ECB meant that for at least seven out of twelve member countries, their political weight (1/18, 18 being the 12 governors plus the six members of the EB) exceeded their economic weight (between 0 and 5% of EMU's GDP) (Berger and De Haan 2002). This discrepancy might have constituted a potential source of incentives for individual governors to exploit their voting power to further the particular interests of their own country, at the cost of deviating from the pursuit of aggregate welfare. This well exemplifies how the structure of decision-making can give space to particular behaviours.

What we learned from the previously mentioned insights of the literature is that, if not solely driven by nationalistic interests, it is still perfectly reasonable to expect governors' behaviour to be at least partially influenced by domestic developments. Now the question is: did such national interests have the potential and the space to capture significant agenda-setting power within Governing Council decisions? If we join structural aspects with such interest dynamics, then we have a compelling case for deeper investigation.

3.2 Internal coalitional dynamics: potential scenarios

I shall now test the impact of potential coalitional dynamics on the perspectives of individualistic interests being able to capture significant decision-making power. In this section, I will regard the introduction of the new rotational system of voting and the EU accession of 7 new members in 2004 (and their progressive adhesion to the Eurozone) as an important structural break.

3.2.1 1999-2004

This sub-period marked the entrance into stage 3 of the European Economic and Monetary Union. The 11 NCBs (12 with Greece since 2001) started to sit at the same table, having to define and agree on a single interest rate for the Eurozone. Heterogeneous macroeconomic developments and geo-political motives are potentially behind the emergence of internal disagreements, which could incentivise coalition-formation within the GC. Here I adopt Mangano's approach (1999) whereby he elaborated some potential coalitional scenarios based on a combination of OECD data (1998) from composite indicators likely to influence monetary policy preferences. As a result, he obtained the following set of groups:

- Netherlands+Finland+Spain+Ireland
- Italy+Poland
- Germany+France+Belgium+Luxembourg+Austria.

Curiously enough, such macroeconomic grouping collocates the three countries adopted as case studies in section 3 of this dissertation each in a different group. Holding the previously discussed assumptions about the EB's attitude, if we consider the degree of fragmentation implied by this macroeconomic grouping, it is reasonable to immediately envision the great potential for the EB to carry a remarkable weight in the decisional process, with its 6 votes being able to determine the winning coalition, by compactly siding with it. This type of consideration is backed by more in-depth voting power indicators (e.g. Banzhaf index and Shapley-Shubik index), whose computations for the EB have yielded values of about 50-66% of total voting power (Mangano 1999; Ullrich 2004)

3.2.2 2004-2007

A first reflection on the potential impact of the accession of 7 new member countries might lead to think about a likely disruption of ECB's capacity to pursue EU-wide objectives for the following reasons. The increase in number of member states, besides the possibility of an increased fragmentation of potential internal coalitions, might have also increased the size of existing coalitions, diminishing the relative voting power of the EB. Moreover, the introduction of a new rotational voting system based on an economic categorization of member states (GDP) might be seen as incentivising cultivating thinking in national categories (Kosior et al. 2008). More criticism regards the fact that the new model might have diminished the overall transparency of the process and individual responsibility of members (Belke and Styczynska 2006).

However, beyond these observations, the Eurozone enlargement and introduction of a new rotational model can also be seen as strengthening the voting power of more (economically) important countries, contributing more to the aggregate welfare of the Eurozone. More importantly, along with several others, the same papers have reached the common conclusion that the reformed voting system has actually led to a significant stabilisation and strengthening of EB's voting power (in terms of Banzhaf and Shapley indices) : this is because, as we consider it as a single bloc, the EB now faces the shrinking weights of the other individual players (Ullrich 2004) and the alterations of existing coalitional dynamics produced by the institutionalised categorisation into defined groups. In other words, the EB seems to have re-affirmed its leading role in the face of an increasingly complex and perhaps fragmented scenario (Bénassy-Quéré and Turkisch 2006).

This section has attempted to demonstrate that, despite the widely recognised persistence of national interests, the ECB's decision-making structure seems to have evolved to confer and preserve a leading agenda-setting role for the Executive Board, with the clear aim to bypass individualistic domestic interests and foster a culture of commonly shared goals. While the pursuit of EU-wide objectives is commonly indicated as beneficial in terms of reducing EU-wide volatility of output and inflation, it remains interesting to explore how this relates to the observed emergence of internal imbalances, in particular with respect to wage developments.

The next section will thus go on to try and pierce the veil of secrecy of ECB's evaluations to specifically analyse the importance that was given to wage-targeting and whether and how this can be seen to have shaped its monetary policy stance.

5. Understanding how wage developments influence ECB's decision-making: a qualitative analysis

At the beginning of this research, I explained my choice to adopt an ECB perspective for my analysis as a way to differentiate my focus from that of the core literature, largely centred around the impact of the structure of wage-setting. More importantly, choosing such viewpoint opens up interesting pathways towards a better understanding of how the ideology behind (and thus the mandate of) the ECB might have imposed a rupture in the dynamics of coordination with wage-setting.

In the previous section, it has been shown how the structure of monetary policy decision-making is likely to have been oriented towards moving beyond the individual interests of member states.

However, the expected benefits from strictly pursuing the aggregate welfare of the Eurozone, need to be confronted with the reality of the destabilising imbalances in competitiveness and current accounts which have progressively emerged in the early 2000's (Johnston 2016). From this perspective, it could be truly insightful to gain a deeper understanding of the role that wage developments might have played within the evaluations underpinning ECB's monetary policy stance. Going in this direction would help identifying whether the introduction of EMU has led to a diversion away from the pre-existing forms of dialogue between central banks and labour unions which had resulted in the generation of a high degree of coordination/cooperation.

The main obstacle to gaining straightforward access to ECB's policymaking is that it does not publish the details of its minutes. This might prevent going beyond the general principles embodied in the original two-pillar strategy that ruled ECB's policy-making until 2003 and then in its revised version which gives less weight to monetary aggregate growth (Costâncio 2018), to understand how each single monetary policy decision was reached and in response to which specific factors and developments.

In order to circumvent this issue, a different research strategy might be employed, one that could complement a mere tracking of interest rates with a systematic analysis of the evaluations of the GC, focusing on wage dynamics. This section aims to do so by carrying out a systematic analysis of all ECB's presidents' official speeches and press conferences held between 1999 and 2007: I have been searching within EBC's archives to collect all the references to interactions with wage-setting, dialogue with wage unions and more generally wage developments. This type of analysis appeared as a compelling way to try and pierce the veil of secrecy of ECB's evaluations to obtain interesting insights both about the subject matter and how the Bank communicates it. The ultimate goal is to derive a coherent underpinning rationale motivating ECB's choices regarding wage-targeting that can be reliably backed by empirical evidence.

5.1 The method: grounded theory

Having to carry out a systematic analysis of this type, I oriented my choice towards a research technique which would allow me to coherently frame text analysis in a way to exploit the formal repetitiveness of ECB's official communications' language, in order to identify recurrent messages or narratives and link them to extract an underlying rationale. In this perspective, the qualitative research methodology denominated "grounded theory" (Glaser and Strauss 1967) constituted the ideal solution.

The specific features of this methodology which make it particularly suitable for this research are the following. It is an inductive process which hinges on an iterative qualitative data analysis: in this way, a tight relationship is established among data collection, analysis and elaboration of a "theory" (Strauss and Corbin 1998). More importantly, this systematic approach relies on the identification, and then "coding" of repeated concepts, ideas or elements. These are then grouped, linked and iteratively re-examined at different degrees of specificity, with the ultimate aim to derive a general theory.

These features appeared to be precisely what I originally identified as necessary to suit the type of analysis that I intended to carry out. Other authors have employed similar text analysis approaches to the objective of detecting national biases in ECB decision-making (e.g. Bennani & Neuenkirch 2016; Moschella & Diodati 2019), however these are mainly of quantitative nature. A more qualitative approach could therefore positively integrate the existing literature.

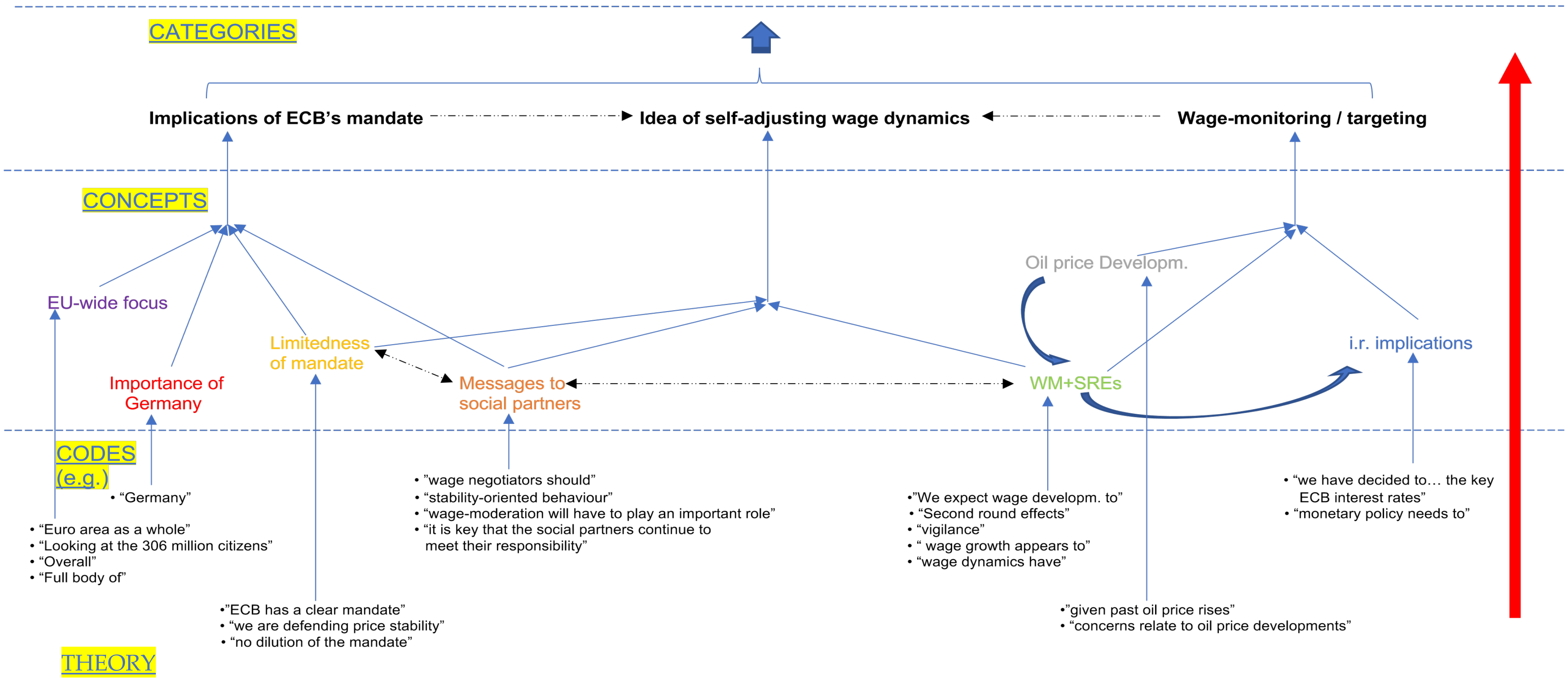
At the first level of analysis, the fundamental operational units of grounded theory are the **codes**. These are identified upon a line-by-line text analysis and are assigned to recurrent messages: in the case of this research, they will largely correspond with expressions and references which are frequently found within the interviews/press conferences and that concern the evaluations underpinning ECB's monetary policy. The second analytical level groups codes into **concepts**, identifying the ideas and factors which appear to be influencing ECB's considerations. These are ultimately grouped into three main **categories** which I denominated “wage-monitoring/targeting” “implications of ECB’s mandate” and “Idea of self-adjusting wage dynamics”. At the top of this “analytical pyramid” there will be the ultimate derivation of a coherent underlying **theory**, which will be exposed at the end of the process.

5.2 ECB press conferences/speeches analysis

The database on which this research relies, consists of a sample of 120 among official press conferences and speeches given by both ECB Presidents or Vice-presidents and, in some cases, members of the EB/GC. Within this sample, I identified 33 press conferences and 9 speeches in which were made explicit references to wage developments, wage-targeting, the role of social partners and considerations about the impact of ECB’s mandate on wage-targeting. These constituted the basis for a progressive application of the methodology of grounded theory: as can be seen in *appendix 2*, it started with a rigorous line-by-line analysis of the excerpts, underlining the relevant recurrent messages (**codes**), thus grouping them and identifying **concepts** and then the overarching **categories**.

On page 41, I have constructed a visual representation of the logical iterative process of analysis which was carried out. I will now proceed to exposing the individual constitutive elements of my analysis, explaining their role and interconnections. In this context, while the actual analytical process has developed in a bottom-up fashion (from **codes** to **concepts** and then **categories**), for reasons of clarity of exposure I will start at the level of categories, to unpack their constitutive elements.

Underlying rationale



5.2.1 Wage-monitoring / targeting

Under this **category** have been grouped all the excerpts in which were made more or less explicit references to an activity of continuous ECB supervision of wage developments in the Eurozone. It was thus interesting to look for the potential characteristics that such wage developments had to display in order to be explicitly referred to as having an impact on ECB's monetary policy decisions. In this sense I identified three main **concepts** which appeared to be quite recurrent within the speeches/press conferences: the importance of oil developments [1] , general considerations about wage growth and the risk of "second round effects" and ultimately the implications in terms of interest rate changes. The process of coding which led to identifying all the references to such **concepts** produced a final result of 63 recurrences, distributed among the three concepts, out of a total of 147 **codes** (42,9%) for the whole dataset.

More interestingly, there seems to exist a consequential relationship between the three concepts, here is why: oil price rises were a recurrent phenomenon in the early 2000s, thus were often mentioned within the press conferences/speeches as potential sources of wage-price upward pressure (x10). Consequentially, close monitoring of wage levels and, relatedly, the need to avoid spill-overs of such oil price rises into core inflation ("second-round effects", Cœuré 2018,p.1), were stressed extremely often (48 times) within the texts through sentences such as:

"*there is ongoing concern about the emergence of second-round effects, so that wage developments need to be monitored very closely*" (Duisenberg 2001, *appendix 2*).

Thirdly, we can see how the relationship between the (potential) exogenous impact of oil price rises and wage developments, as mediated by so-called second-round-effects (SREs), gave often

[1] I have used coloured characters to indicate the same concepts in the text, in the visual representation and in *appendix 2*

rise to implications for interest rate decisions an example of this could be found in sentences such as:

"Any attempt for wages to catch up in reaction to recent oil price increases would be highly detrimental to the current favourable growth prospects, since monetary policy would need to react to the resulting upward pressure on prices" (Noyer 2000, appendix 2)

We can thus perceive a tendency for the ECB to display a certain degree of reactiveness to wage developments especially when they are connected to dangerously broad upward price movements which might threaten overall price stability in the Eurozone.

In order to better characterise these conditions which shape ECB's responsiveness to wage developments, I now turn to the second **category.**

5.2.2 Implications of ECB's mandate

This **category** represents all those elements from the texts which more explicitly appear to be ascribable to the guidelines/limitations imposed by ECB's mandate onto the scope of its operations within monetary policy. Reaching the total number of 82 **codes** (57,1%) distributed among 4 **concepts**, these largely defined both the contrast between a particular focus on regional and EU-wide developments and the limitations with regards to establishing an institutionalised social dialogue with labour unions from member states. The first two elements are represented by the categories "EU-wide focus" and "importance of Germany", while the second two by "limitedness of mandate" and "messages to social partners".

EU-wide focus was used to collect all the references (23) to ECB's formally-stated orientation to having an impartial EU-wide focus in its operations. These comprised **codes** such as:

"*the Euro area as a whole*" (Trichet 2006, *appendix 2*), "*looking at the 306 million citizens*" (Trichet 2004, *appendix 2*) or "*the full body of the Euro area*" (Trichet 2007, *appendix 2)*.

At the same time, Germany and its labour union(s) were recurrently mentioned (13 times) both by the interviewers and, more importantly, by the ECB's members. Also, it was the only country to be specifically mentioned. Despite very few explicit references to the importance of Germany and in the Eurozone economy (e.g) and thus in ECB's monetary policy evaluations, the mere fact that it was given significant importance within ECB's statements could be considered as representative of the fact that it does indeed play a key role in ECB's evaluations.

With regards to references to the limitedness of the mandate, there were 9 instances in which it was stressed how the primary task of the ECB is to maintain price stability in the medium term and how there should be no "*dilution*" (Duisenberg 1999, appendix 2) of such mission. This was often accompanied by sentences putting forward the idea that the mere defence of overall price stability is enough for the monetary authorities to foster stability and growth.

Some exemplary **codes** falling within such **concept** are the following:

"I have already said that by caring for credibility and the delivery of price stability we permit growth to be sustainable" (Trichet 2007, appendix 2) or

"A credible monetary policy strategy oriented towards price stability contributes to moderate nominal and real wage developments" (Trichet 2005, appendix 2)

Such aspects are, in my view, complemented by the **concept** which I labelled as "messages to social partners". This was the result of grouping a remarkable amount of **codes** (36) which display the common feature of constituting an evident way used for the ECB to communicate with labour unions and wage-setters, largely in the form of exhortations to maintain wage moderation in order to sustain the pursuit of price stability. This type of message seems to play a key role within ECB's official statements, appearing regularly following considerations regarding oil price developments and wage-monitoring and second-round-effects (WM+SREs). In this sense, these messages might appear as an attempt to maintain a rather unidirectional channel of communication with social actors which necessarily implies a downward re-shaping of their role, from active protagonists of domestic social dialogues to mere supporting forces to monetary authorities. The standard **codes** ascribable to this **concept** are the following:

"wage moderation will have to play an important role in containing inflationary pressures in the coming years" (Duisenberg 2001, appendix 2) or

"it is crucial that the social partners continue to meet their responsibilities" (Trichet 2006, appendix 2)

5.2.3 Idea of self-adjusting wage dynamics

This third **category** constitutes a hybrid combination of some elements from the other two which, taken together, seem to represent a peculiar attitude that the ECB might have with respect to wage dynamics. These are limitedness of mandate, message to social partners and WM+SREs. When analysed together, as interlinked elements, these **concepts** can be seen as underpinning a sharp separation between the duties and aims of supranational monetary authorities and domestic social partners. More interestingly, official ECB statements from the early 2000's seem to corroborate the idea that there is no need for active cooperation/coordination between monetary policy and wagesetting (Issing 2002): as a consequence, the ECB would only need to ensure price stability, while national social partners would only need to adjust their demands basing their decisions on a firm trust in the credibility of the ECB. These behaviours, combined, would then theoretically be enough to yield optimal results in terms of stability and growth. E.g.:

"Once the public is convinced of the central bank's commitment to preserving price stability, they will act - for example, in wage and price-setting - in a way that facilitates the achievement of this goal" (Duisenberg 2000, [appendix 2](#))

5.3 Deriving the underlying rationale: an epistemological rupture

I shall now draw together all these different insights in order to derive a coherent rationale, which can hopefully shed light on the ECB's attitude towards wage-targeting in the early 2000s. This will allow me to reach the ultimate stage of grounded theory's process, which is indeed the derivation of a **theory.**

The ECB does not appear to be willing to engage in explicit coordination with social partners. Instead its monetary policy seems to be influenced by wage settlements only when they pose serious risks of contagion to price levels and thus create EU-wide inflation, compromising the one objective standing at the core of ECB's mandate: price stability. In this sense, the early 00's were characterised by persistent rises in oil price, threatening the emergence of oft-mentioned second-round effects through subsequent excessive wage demands. The ECB constantly stated to be keeping a vigilant attitude with regards to these developments as they indeed posed aggregate inflationary risks. As the ECB seems to be placing disproportionate attention to the systemic level, the macroeconomic weight of a country such as Germany (and thus its wage settlements) necessarily played a key role in determining ECB's evaluations on its monetary policy stance. This could also partly explain the parallelism in trends of ECB interest rate and wage levels in Germany throughout the years which I identified in section 2.

On the other hand, the ECB appears to have maintained a constant line of (unidirectional) communication with European social partners, regularly urging them to behave responsibly and ensure wage moderation while relying on the maintenance of price stability. In other words, monetary authorities have displayed a firm belief in the fact that if every actor sees to their own specific responsibilities, optimal aggregate results would be necessarily achieved, without any sort of *ex ante* coordination. While the creation of a monetary union logically entails a structural impossibility to have a single monetary policy being influenced by several distinct lines of dialogue, it does not seem equally logical to expect such firm belief in the futility of maintaining any active dialogue at all or fostering labour unions coordination at a European level.

Rather, there seems to be some deeper ideological factor at play which might grant resorting to the insights on the dimensions of ideational power which I introduced within the theoretical framework section.

With the Stability and Growth Pact in 1997, the broader Brussels-Frankfurt ordo-liberal consensus on economic policy <u>output</u> goals was effectively institutionalised (Carstensen and Schmidt 2018). The ECB was then designed as the sole guardian of price stability, while the responsibility to monitor and reform labour markets was left to member states. The old interactive, dialogical relationship between central bank and wage-setters was thus replaced with a single, elevated institution unfolding its power <u>in</u> ideas towards a constellation of social partners, with different structures, incentives and path-dependencies.

The ECB only slowly reached a complete awareness of the dangerousness of the imbalances in competitiveness within the Euro Area and then, especially under Trichet, moved onto a stronger advocacy of the need for structural reforms in national labour markets. Before then, however, the new normal implied by the creation of EMU was based on the optimistic conviction that the intellectual authority of the ECB would be enough to significantly affect the pay-offs of the strategic game laid out earlier. Moreover, from a structural viewpoint, a single Euro-wide monetary policy stance could not be much more than a blunt weapon within the old signaling game, as the fragmented scenario of European labour unions (with their specific interests) was incomparably more detached from the implications of monetary policy decisions than before.

These developments can somewhat be assembled under what I have previously defined as an "epistemological break" in the relationship between monetary policy and wage-setting: a diametrically different way to interpret the dynamics of interaction between the two, when compared with the interactive, dialogical features which had underpinned pre-EMU national social pacts. In this light, the introduction of EMU and the design of a conservative ECB can be seen as responsible for placing disproportionate attention on the pursuit of aggregate price stability, while underestimating the heterogeneity of wage-bargaining structures in EMU's member states and their different capacity to withstand alteration of incentives in the form of payoffs in the coordination game with monetary institutions.

6. Concluding remarks

This study has investigated the impact of the introduction of EMU on the interactions between monetary policy and wage-setting in Europe. More specifically, I chose to adopt an ECB perspective, aiming to identify whether a different conceptualisation of the dynamics of coordination/cooperation with labour unions had developed once national CB governors had started to sit at a single, supranational table.

In order to build a coherent argument, the empirical analysis was divided into three different, but consequentially interconnected stages, covering the period between 1992 and 2007.

- The first aimed to show that the introduction of EMU indeed produced an alteration of the pay-offs in the coordination game between monetary and wage-bargaining actors, relying upon brief case studies.
- The second set out to identify the forces that have been largely steering monetary policy-making once delegated to the ECB, based on structural, voting-power explanations.

- The third relied on a qualitative analysis of ECB’s official statements to understand what role wage developments have played within ECB’s evaluations: this was conceived to ultimately test the idea of an epistemological break in the way monetary authorities deal with the heterogeneity of wage developments within a highly heterogeneous monetary union.

Recent literature on related topics has largely focused on selected structural characteristics of labour markets and wage-setting institutions or on estimating the reaction function of the ECB. The value added of this work is to be found on the comprehensive nature of the analysis which combines a range of methods to address both structural economic aspects and political economy implications. In this context, the focus on the ECB somewhat constitutes a novelty. This is not the result of a choice to narrow down the scope of the analysis to one actor, but rather a natural outcome of the analysis itself: the ECB was progressively identified as the pivotal player in the evolution of the strategic game between wage setters and central bankers, so the analysis unfolded in that direction. On the other hand, this work did not go to the extent of including a thorough study on the role of the ECB in the advocacy of structural reforms in European domestic labour markets: this aspect is indeed very important as it is complementary to insights into coordination with wage-setters and offers interesting avenues for further research in the field.

Drawing everything together has hopefully allowed me to demonstrate that the introduction of EMU has indeed constituted a turning point in the history of coordination/cooperation between monetary policy and wage-setting in Europe. The single monetary policy has significantly altered the constellation of interests and incentives shaping such interactions between a now centralised monetary institution and an extremely fragmented front of domestic-oriented labour unions. The relative harmony which had been ruling national social pacts and their tailoring to the specific monetary stances of the individual countries was necessarily disrupted. Somewhat paradoxically, when we look at this harmony largely as a by-product of Maastricht's conditionality, stage 3 of EMU appears as a reality check of the destabilising heterogeneity characterising its member states.

On the other hand, as I have attempted to show, the structure of ECB's decision-making leaves little space for individual (domestic) interests to capture significant agenda-setting power. Contrarily, largely driven by the Executive Board's EU-wide focus, the rigorous pursuit of aggregate price stability, seems to have fed into the conviction that no active dialogue was needed with labour unions. In fact, the qualitative analysis of ECB's official statements has produced evidence of a blind faith in the efficiency of monetary conservatism, totally underestimating the potential imbalances which could arise from the heterogeneity of labour markets and wage-bargaining systems: we have then witnessed the emergence of such critical imbalances in the build-up to the sovereign debt crisis, once the incentives of Maastricht's conditionality were dropped and several peripheral member states' labour markets' weaknesses exposed (e.g. Italy in section 3) . In parallel, countries with stronger wage-bargaining institutions (e.g. Netherlands section 3) which could have sustainably benefitted from a (relatively) more expansionary monetary stance, have had to settle for the mild responsiveness needed to accomodate the heterogeneity of EMU's labour markets. The ECB became progressively aware of the size of such imbalances and their potential role in the build-up to the crisis, which makes the absence of dialogue with wage-setters even more surprising. Only once the crisis hit, the later ECB advocacy of structural reforms evolved into a concrete in(formal) conditionality mechanism effectively pushing member states to intervene on their labour markets. In essence, this can be seen to have constituted what I have defined as an epistemological rupture: the move away from the dialogical, cooperative relationship between national monetary and wage bargaining institutions which had marked the years between 1992 and 1999, towards a rigorous definition of separate competences, relying on the ECB's conviction that, if everyone performs their task diligently, all will go for the best. Clearly this was not the case.

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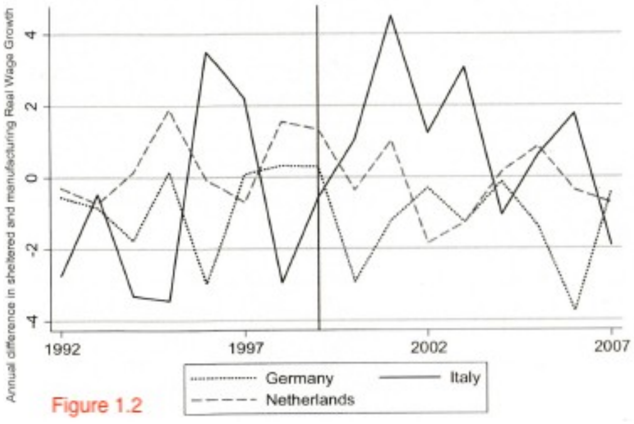
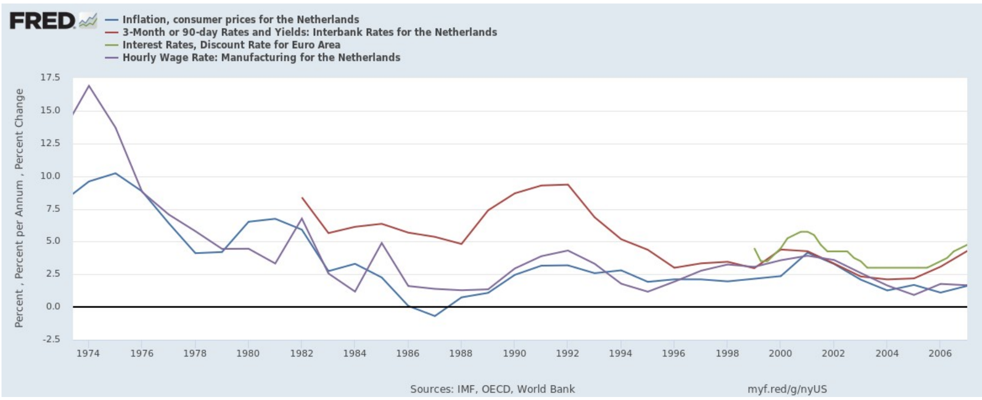
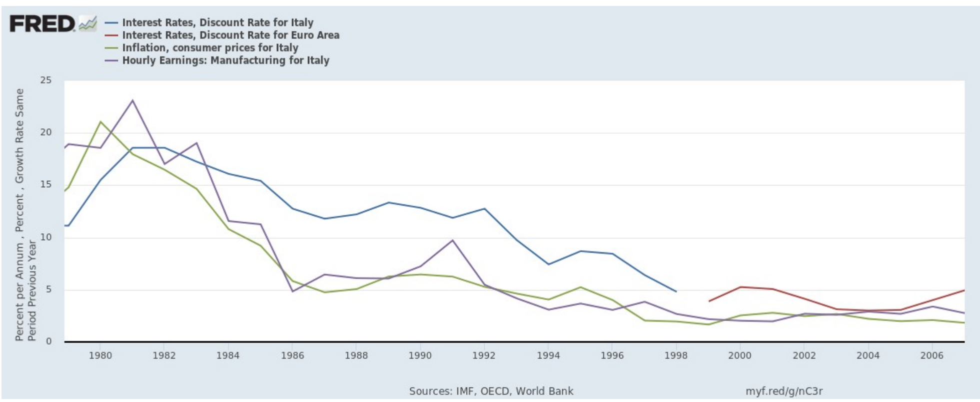
8. Appendix



1.a (Johnston 2016)



1.b (FRED: World Bank, IMF, OECD data)-own elaboration



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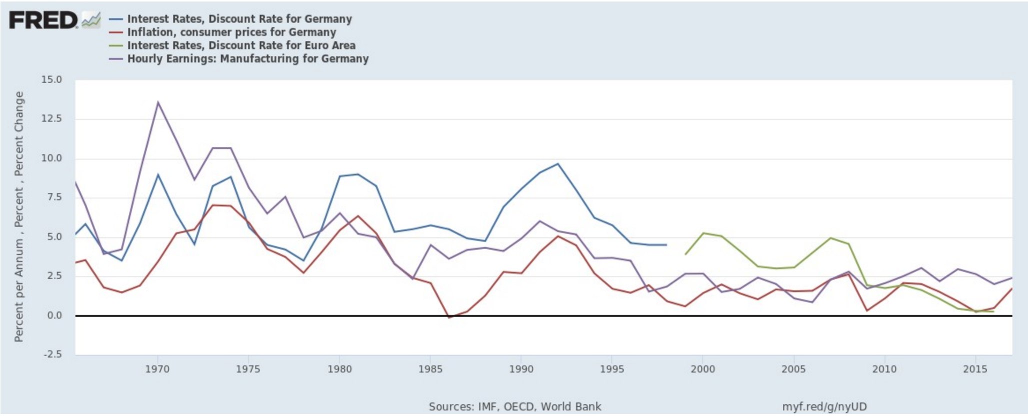

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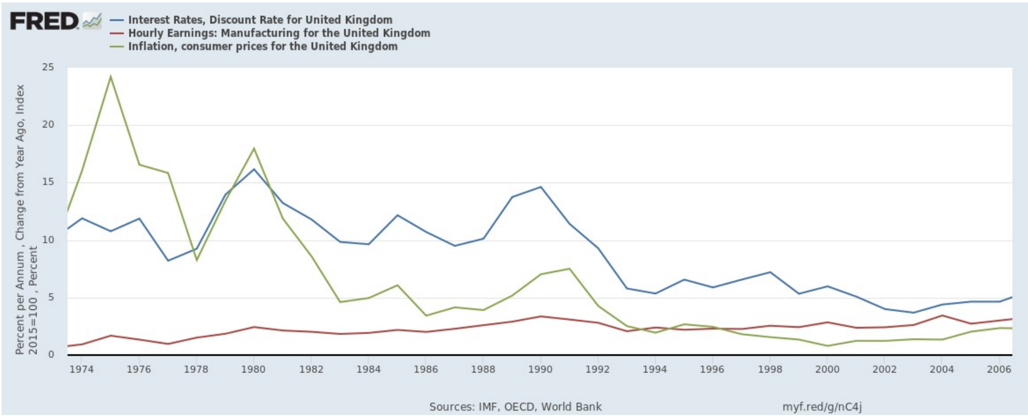

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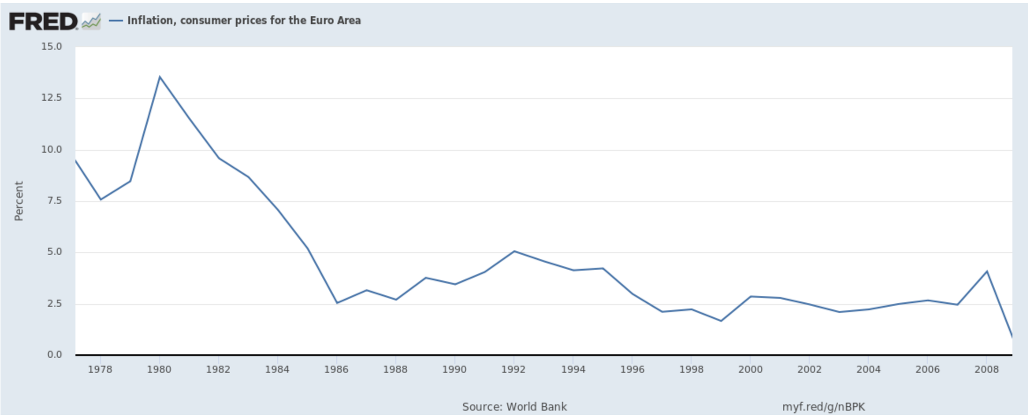

1.f (FRED: World Bank)

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http://www.lse.ac.uk/european-institute/research/leqs-discussion-paper-series