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Towards a tacit low-degree independence central banking model ?

Bertrand BLANCHETON

GREThA, CNRS, UMR 5113

Université de Bordeaux

bertrand.blancheton@u-bordeaux.fr

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GREThA UMR CNRS 5113

Université de Bordeaux

Avenue Léon Duguit - 33608 PESSAC - FRANCE

Tel : +33 (0)5.56.84.25.75 - Fax : +33 (0)5.56.84.86.47 - www.gretha.fr

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Abstract

This article puts the independence of central banks into historical perspective. In doing so, it underlines the highly versatile nature of the balance of forces between central banks and governments. From this viewpoint, the situation of public finances emerges as a key explanatory factor, and an analysis of the sequence of central banking models is proposed from the late 19th century to the present day. The article upholds the thesis of the emergence, since the subprime crisis, of a new model qualified as “tacit low-degree independence”: central banks have, of their own volition, given up some of their de facto independence, helping governments to contain the rise in national debt. But while keeping a step ahead of pressure from governments, they have lost the control of money supply.

Mots-clés : central banking, public debt, central bank independence.

Vers un modèle d'indépendance tacitement faible des Banques centrales ?

Résumé

Cet article met en perspective l'histoire de l'indépendance des Banques centrales et du Central Banking. Il montre l'importance de la dette publique comme déterminant de l'indépendance. Il défend l'idée de l'émergence d'un nouveau modèle de Central Banking. Les Banques centrales (Fed, BCE, Banque d'Angleterre...) ont aidé, notamment par des mesures de politique monétaire non conventionnelles, les Etats à contrôler la dynamique de la dette publique. De fait elles ont perdu le contrôle de l'offre de monnaie. Retenant les leçons de l'histoire du vingtième siècle elles semblent avoir préféré venir immédiatement en aide aux gouvernements sachant que compte tenu de la gravité de la situation ces derniers n'auraient pas hésité à remettre en cause leur indépendance juridique. Une configuration d'indépendance tacitement faible découle de cette situation.

Keywords: Dette publique, Banque centrale, Indépendance, Central Banking.

JEL: N10, N20, G20, N40.

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Introduction

Even though there has been no change in legislation governing the independence of central banks, a new era has indeed dawned since the financial crisis of the late 2000s. Financial upheavals and growth in sovereign debts have prompted central banks to help governments to liquidate debt even if it has meant losing control over the money supply. Beneath the dross of tales about the degradation of sovereign ratings, tectonic movements have affected central banking and outlined the definition of a new model that could be qualified as “tacit low-degree independence”. Central banks (Fed, ECB, Bank of England...) have digested the fact that they must help governments if they wish to avoid legal restructuring. This capacity of major banks to keep a step ahead of government wants and needs could appear to the fruit of progress in terms of transparency, a new development in the capacity to listen to political representation and to opinion (Eijffinger and Geraats 2006, Crowne and Meade 2007), and also to assimilate the lessons of history in central banking.

Placing the question of the independence of central banking into an historical perspective casts light on its evolving nature, in pace with changes affecting monetary systems, economic structures and also the personality of the highest-ranking officers. History reminds us of the extent to which relations between a government and a central bank can change quickly. From a legal standpoint, statutes are never set in stone. When it comes to facts, the balance of power may evolve at any time, geared to a number of factors and transformations that lead to the adjustment of monetary policy, as shown by R. Hawtrey in “The Art of Central Banking” (1932) or more recently and in a different register, by A. Greenspan in “The Age of Turbulence” (2007).

The common thread of this articles lies with the analysis of theoretical and historical interactions between sovereign debt and the independence of central banks. It is the scope of this debt that today has prompted central banks to reduce independence of their own accord.

Our approach is three-phased. A first section characterizes the independence of the central bank to underscore the complexity of interactions between legal or de jure independence and de facto independence. A second section puts the evolution of the question of independence into an historical perspective and proposes an original analysis of the continuity of models of central banking since the late 19th century. The third section analyses the theoretical and empirical interactions between public debt and independence of the central bank. A final section concludes with the outline of a new model of central banking hatched from lessons learnt from the history of independence.

1. A Characterization of Central Bank Independence

1.1 De jure independence versus de facto independence

A journey back through history reminds us of the extent to which the independence of a central bank is complex and unsettled. Independence is gradual by nature, as suggested by the famous quote attributed to Napoleon Bonaparte when talking about the then very young Banque de France: “*I want the bank to be more in the hands of the government but not too much*”¹. Absolute independence does not exist, the very minimum being that policy-makers, especially governors, and money that owes its existence only to the confidence of the general public, are destined never to completely escape the influence of political leaders over time. From another angle, even a

¹ Declaration to the Council of State, March 27, 1806, Cited by Ramon G, p.77.

nationalized central bank can, through the voice of an outspoken governor, express a monetary viewpoint that diverges from that of the government and look to exert its influence in the conducting of monetary affairs.

In literature, to appreciate relations between a government and a central bank, the custom is to consider both *de jure* (legal) independence and *de facto* (operational or effective) independence. In particular, legal independence is defined by the conditions of nomination and removal of the heads of a central bank, the conditions for defining objectives and the nature of financial relations with the government. Independence *de jure* has been measured in any number of ways in recent times (Cukierman, Webb, Neyapti, 1992, Alesina, Summers, 1993, Crowe, Meade 2007). In an historical perspective, attempts to measure legal independence are much less frequent, as historians prefer to broach the subject from a more qualitative angle and look to appreciate the equilibrium of the present moment and the dynamics of balance of power.

Independence *de facto* refers us back to a bank's more or less real capacity to effectively utilize its instruments and to compellingly express its arguments in monetary and budgetary debates. Measuring independence *de facto* seems more difficult. Here, background characteristics really matter: the monetary system and the more or less consensual opinion thereof in the public eye (its credibility), the degree of openness of the national economy, the nature of financial innovations... The situation of public finances also appears to be a key factor of understanding. "Budgetary pragmatism" is often opposed to the "dogma of monetary stability", proclaimed in virtually all circumstances by the central bank². The bank's capacity to exert influence depends on the quality of its expertise and on the personality and career of its governor. The history of relations between bank and government is then a hot potato that is hard to gauge, made up of human relations; it scoffs at certain myths about the supposed independence of such and such an institution. Measuring these factors appears in fact impossible.

1.2 Contrast and complexity

A contrast may emerge between the degree of legal autonomy and that of real *de facto* independence. For instance, in France, based on the Act of January 3rd, 1973, which maintains the authority of the French State and the possibility for the government to obtain financing (even at no cost³) from the Banque de France, the latter institution in the 1980s was rated amongst the least independent of all developed countries and even further afield. In the study by Cukierman, Webb

² When taking up his function in 1949 as governor of the Banque de France, W. Baumgartner used an analogy to characterize the relations between the central bank and the government, "*these two halves of God, the Pope and the Emperor*". If they are able to settle peacefully the quarrel of nominations, the central bank and the State effectively – and permanently – hold between them the destiny of currency that historically has been torn between the demands of the dogma of monetary stability and the temporal temptation of action through the channel of public finances.

³ A stubborn myth presents this Act as a conspiracy, allegedly giving the Banque de France solid independence and stymieing any subsequent allegiance to the Government. The State would have been forced to turn to the markets for financing, leading to an increase in the public debt. For the far left, the nationalist right-wing and also for M. Rocard, this Act would mark a break in the financial relations between the bank and the government, blocking the possibility to mint money in order to finance public spending and obtain the Bank's cooperation at zero cost. In reality, article 19 of the Act upholds the possibility for the Government to obtain advances and loans... "the conditions under which the Government can obtain advances and loans from the bank are set by agreements signed between the Minister for the Economy and Finance and the Governor, authorized by the Council of State. These agreements have to be approved by parliament." A treasury agreement of September 17, 1973, thus set the amount of aid from the bank at FF20.5 billion, half of which at no cost. The Act of 1973 very clearly protects the possibility for the Government to obtain finance from the Banque de France – even at no cost – and keeps it under strict guardianship (for more details, see Blancheton, 2014).

and Neyapti⁴ (1992), which proposes a ranking of central banks according to their degree of legal independence, the Banque de France appeared in 16th position amongst the 21 industrialized countries under study, and was ranked only 59th amongst all the 72 countries considered. The aggregate composite index of independence was 0.24, versus 0.69 for the Bundesbank at the top of the ranking, 0.64 for the Swiss Central Bank (ranked second), 0.48 for the Fed, and 0.27 for the Bank of England. Other empirical studies reach conclusions that are practically identical⁵. Here there emerges a contrast between the low level scores for the Banque de France and the reality of operational independence underlined by historiography (see Duchaussoy 2013). In the 1980s, the Banque de France successfully modernized its system for the collection and processing of information and developed communication strategies in regard to economic agents (cf. the creation of a communication office in 1985). Adjustments to the conducting of monetary policy took a more technical turn, giving full control over the said policy (from 1986, a move from the supervision of credit to actions via interest rates in a renewed monetary market). Its expertise is now acknowledged by national dealers and foreign operators, with whom it cooperates to stabilize exchange rates (Reichart 2014). Additionally, it has managed to successfully conduct a competitive deflation strategy.

In USA when we consider conventional indices of de jure independence computing by Crowe and Meade (2007) any change appears over time for Fed “the Federal Reserve’s score – at 0,48 – is unchanged today from 1980s because the underlying central bank law has not be amended” (2007, p.73). Fed score is well below average because employment objective could conflict with the price objective. But as Meltzer (2009) shows many changes characterize de facto independence. In the late 1960’s the loss of de facto independence was driven by US administration. It regains de facto independence in the 1980’s 1990’s and has since sacrificed its independence again by cooperating with the Treasury, engaging in fiscal policy in order to reduce public debt ratio, “Chairman Bernanke has acted frequently as a financing arm of the treasury” (2009, 1255-56). According to Taylor (2013) in any case there is a very close correlation between the up and down in de facto independence and the adherence to rules-based policy in the US during the period. With Paul Volker and much of Alan Greenspan’s term the more rule like focus on price stability and the closer adherence to simple predictable policy rules clearly appear. During part of the Great Moderation between 1984 and 2003 Taylor (2013) considers changes in monetary policy as a major reason for improved economic performance (measuring by variability of output and inflation). Since 2003 policy became much more discretionary with interventions into particular markets, with the expansion of the FED’s balance sheet and with the commitment to hold the interest rate to zero. Discretionary practices were driven by Fed in response to new context particularly after subprime crisis, it anticipates government constraints and aspirations. According to Taylor “the loss of de facto independence more recently was driven by Fed itself” (2013, 15).

⁴ This ranking is grounded in “standard criteria”: the conditions of nomination and removal of directors, the definition of monetary policy objectives, the nature thereof and the intensity of financial links with Governments.

⁵ The Alesina index of legal independence (1988) places France at level 2 on a scale of 1 to 4. That of Eijffinger & Shaling 1991 places it at level 2 on a scale of 1 to 5. The index of Grilli, Masciandro & Tabellini (1991), which combines political and economic independence on a scale of 3 to 13 gives a value of 7 for France (of which 2 from 6 in terms of political independence).

2. The tectonics of central bank independence since the late 19th century

This section proposes an original analysis of the continuity of models of central banking since the late 19th century. As frequently in economic history these models are literary models without mathematical specification.

2.1 Bank of issue model

Under a gold standard regime, the issues at stake in connection with a central bank are singularly complex. Over and above national differences, we can locate a model bank of issue. Most issuing institutions are private banks looking for profit (Bank of England, Banque de France, Reichsbank, Banca d'Italia, Banque Nationale de Suisse...). These institutions have a monopoly of issuance and also assume the functions of Treasury bank and bank of banks. As they turn into true central banks, they increasingly fill a role of lender of last resort and as a result are seen to be under government supervision. At an operational level, they are unable to arbitrarily modify the contributions of the monetary base. Consequently, the ante at stake with issuance policy is low and is more concentrated on slight variations in the practice of discount. Before WWI, central banks didn't attached great weight to the goal of maintaining the domestic economy's stability (see Figure 1 for a positioning of this model).

The proclamation in 1914 of the flat regime and the gradual shift to currency holding systems upped the ante associated with the management of monetary affairs. Monetary policy and central banking entered an era of "modernity", which consisted primarily of greater instability, discretionary options, monetary illusion and democratic aspirations. In the aftermath of war, faced with the difficulties of governments to re-establish earlier monetary and financial structures, central bankers appeared to be tempted by greater independence.

At the same time as they were developing a model of international central banking (Cottrell, 2012), a one Montagu Norman, the emblematic governor of the Bank of England (an institution that at the time was something of a model on a world scale) and Benjamin Strong, Governor of the US Federal Reserve Bank, were claiming greater independence. Conducting monetary policy, in their opinion, was becoming increasingly technical, as testified at this same period by the growing power of the research departments inside issuance institutes and the intensification of experience feedback between central banks. Norman was expounding radical positions, totally challenging the legitimacy of political intervention into monetary affairs. On a visit to London in October 1926, Pierre Quesnay, the then Secretary General of the Banque de France, noted: *"He feels that the world's economic and financial organization must be the work of the 20th century. Politicians, in whom he recognizes the qualities needed to decide upon political problems, seem to him to be in no state to conduct with any continuity this task of organization that he would like to see undertaken by banks of issue, that are independent of both governments and private financiers (...) They would successfully remove from the political arena the issues that are essential to the development of national prosperity, like monetary security, the intensification of credit and the movement of prices. They would thus prevent political infighting from harming the wealth of nations and their economic progress"*⁶. Quesnay did not fail to notice that Norman's megalomania was alarming his contemporaries even in the United Kingdom and unquestionably constituted an obstacle to the promotion of his conceptions regarding the nature of relations between governments and central banks. Milton Friedman (1968, part 2, chapter 2) observed that with Norman we were witnessing an implicit doctrine that was clearly a framework

⁶ National Archives, Papiers Pierre Quesnay, 374 AP 6, notes taken during a trip to London between the 11th and 16th of October, 1926.

for dictatorship and totalitarianism. With Friedman, the risk involved in leaving power in the hands of such individuals was a key argument for rejecting the solution of an independent central bank, and for leaning in favour of legislating rules. But as noted by R. Sayers (1976), even if Norman was demanding independence, the institution he directed “should accept Treasury control over policy” (p.15).

In continental Europe, this aspiration to greater independence clashed with the question of sustainability of the public debt. Faced with the necessity of rebuilding economies, monetary policy was dominated by budgetary policy. Central banks had to conduct monetary policies that were accommodating, resulting in either uncontrolled inflationary sequences, as in central Europe (Germany, Poland, Austria, Hungary) or stabilization/devaluations as seen in France, Belgium or Italy.

2.2 The emergence of a public central bank model

In the 1930s, a movement to control banks of issue by governments was apparent on an international scale and the model of a public central bank began to take shape. Political leaders intended to take greater control over banking and financial systems, the instability of which had led to a collapse in economic activity. In a context of deep depression and major transformation of capitalism, a section of public opinion suspected that central banks were in the hands of private financiers and were lacking sufficiently acute awareness of general public interests. In particular, the finger was being pointed at the inept management of the banking crises in the early 1930s: “*Central banks had also largely failed in dealing with banking crises, and governments stepped into that area as well: this was typically the case of Italy, Austria, Germany, and Hungary*”... (Toniolo and Clement 2005, p.293). Concern for profit was deemed incompatible with operations of public interest; additionally, a nationalized central bank would be better able to assert its authority over banking establishments.

But were central banks up until the early 1930s conducting policies that were running counter to the general interest? Nothing could be less certain. For Italy, A. Gigliobianco states that the “Banca d’Italia” was voicing primarily the viewpoint of the State, not that of the financial community. For France, P-C. Hautcoeur is categorical: “*it is impossible to understand the policy of the Banque de France if you believe that the profits of its shareholders play a role in its orientation...*” (1990, p.302). For several decades, the Banque de France has very often been governed by former senior officers from the Treasury.

Whatever the theory, control over central banks came about rather quickly. In Great Britain, the supremacy of the Treasury was clearly established from 1931 onwards and the slide in the pound sterling (R. Sayers). In 1936, the Danish central bank was nationalized. That same year, the legal transformation of the Banca d’Italia (banking law and reform of statutes) reflected a determination to strengthen the State’s influence and focus on public interest that was already pretty much present within the institution. The banking act banned the Banca d’Italia from dealing in commercial activities with clients other than banks. In Belgium, the public nature of the institute of issue was clearly strengthened: the attributions of the government’s commissioner were extended and the conditions required to become regent or censor were toughened, a move that reduced the influence of bankers (Danneel, Maes, Pluym, 2005). In 1938, in turn, the Bank of Canada was nationalized.

The French case illustrates the suddenness of the turnaround with regard the independence of the central bank. Since the Poincaré’s “stabilization” and thanks to budget surpluses, the Government’s financial needs were lower. The operational independence of the Banque de France looked to be strong and the bank seemed to be defining and implementing alone future directions for issue policy. From 1932 onwards, as the Treasury began looking for funds to cope with emerging budget deficits, the Banque de France was increasingly forced to deal with difficulties that the Treasury was now

facing on account of high interest rates (Mouré 1991). However, up until 1934, the bank retained a relatively high degree of autonomy gained as a result of efforts to stabilize the French franc. The choice of several governments, opting for deflationary policies while belonging to the gold standard block, expressed a national – and dogmatic – attachment to monetary stability achieved with some difficulty during the 1920s (Blancheton and Maveyraud 2009). The Treasury's monetary demands seem to have played a key role in the replacement of M. Moret (governor of the Banque de France since 1930) by M. Tannery in January 1935 and, a few weeks later, in the resumption of advances from the central bank to the Treasury, despite the monetary act of June 1928 that was to put an end to such practice by closing the bank's account for temporary advances to the State. The election of the Front Populaire in 1936 was to have a catalyst effect. The agenda laid out by the left-wing government planned to rid the bank of influence from business circles, in particular the Haute Banque. It is true that the "regency board" at that time included seven representatives from these circles (out of a total of fifteen members).

As from June 6, 1936, Emile Labeyrie was appointed governor, replacing Jean Tannery, seen to be too active in his support for the deflationary policies of Pierre Laval. The Act of July 24, 1936 introduced a profound reform of the governance of the Banque de France, whereby Board representatives from private shareholding were to be replaced by qualified personalities appointed by the government. The General Meeting was extended to all shareholders. Here, the power of the legendary "two hundred families"⁷ (the 200 largest shareholders in the Banque de France making up the Shareholder Meeting) was clearly in the firing line. The Act officialized, rather than promoted, the search for general public interest. It enacted a de facto nationalization of the Banque de France, which nevertheless remained a private bank of issue. In this context, the bank, in search of financial stability, speeded up its modernization process, in particular by adapting monetary policy instruments and turning to the open market, but it could not avoid heavy depreciation of the French franc. The process of reining in the bank continued under the Vichy regime. At the Liberation, it was crowned by the Act of December 2nd, 1945, which introduced a de jure nationalization of the Banque de France. The State was now the sole shareholder. Furthermore, this same act included nationalization of major banks and reorganized the credit system.

In the 1940s, the model of public bank of issue, in the pipeline since the 1930s, became established on an international scale (Singleton 2010). The capital of many European central banks was 100% state-owned (Ireland (1942), West Germany (1948), the Netherlands (1948) and Norway (1949)...). Outside of Europe, the same movement towards greater control over central banks by governments was at work in New Zealand and also Argentina, where the central bank, founded in 1935, was nationalized in 1946. Notwithstanding the weight of history, the grand old lady of Threadneedle Street was also nationalized by the Bank of England Act of 1946. F. Capie (2010) highlights the major issues at stake with this movement: a greater sense of the public interest, the central bank's control over business banks, and a redefinition of relations with the Treasury. In Spain, the government of Franco refused to nationalize the Bank of Spain, but *"a new law in 1946, which superseded that of 1921, established the new relationship between the government and the Bank. It reduced the latter's autonomy and monetary power. The law did not nationalize the institution but it strictly regulated all its operations and functions. With regard to domestic monetary policy, all responsibilities were taken by the Treasury (...). After 1946, monetary discussions disappeared entirely from the weekly meetings of the Board and if such subjects were raised they were immediately blocked by the government's delegation"*, (Feiertag and Martin Acena 1999, p.62-63). In Belgium, the cabinet of Spaak-Eyskens, which in March 1947 implemented the organic reform of the Belgian national bank, emphasized the necessity to *"ensure at once the independence of the national bank from private interests and its collaboration with the general policy of the public authorities"* (cited by Danneel, Maes & Pluym

⁷ An expression employed by Edouard Daladier at the "Congrès Radical" of October 1934.

2005). The State took a 50% stake in the national bank, altered the composition of the board of regency, and strengthened its powers of nomination for directors.

The vast majority of central banks were now under the thumb of governments. The central bank of Spain was nationalized in 1962, that of Portugal in 1974, and the Bank of England, still a model at the dawning of the 1970s, was kept under control. Up until the 1970s, the model of a public central bank remained in force. Central banks appeared as loyal institutions, cooperating with Treasuries. Monetary policies were integrated within more global State-led economic policies in order to maintain the domestic economy's stability (see Figure 1 for a positioning of this model). Naturally, central bankers were able to express their strategic disagreement, deplore the implementation of budgetary policies deemed too expansionist, and express their concerns over the stability of the value of a country's currency. According to Singleton "It would be unfair, however, to conclude that the typical central bank became a mere adjunct of the government machine. One or two particularly self-effacing governors, such as Nugget Coombs in Australia, came close to subservience at times, but many other governors and central banks managed to preserve a considerable degree of autonomy. The Federal Reserve System successfully reasserted its independence from the US Treasury in the early 1950s" (2011, p127).

The case of the German Bundesbank is well worth noting. In reaction to monetary instability over the period between 1921 and 1933, and also at the end of the 1940s, the Act of July 26, 1957, awarded the bank firm de jure and de facto independence. Article 3 of the Act assigned the central bank with the mission of safeguarding the country's currency, while article 12 stated that no instructions would be forthcoming from the federal government.

2.3 The independence model for central banks

The end of the 1970s was marked by a change in the economic paradigm further, most notably, to the works of Friedman, focused on currency, and of Kydland & Prescott on the rules of economic policies. To boost long-term growth, liberal economists were advocating advanced international financial integration and competitive deflationary policies. The stability of prices was supposed to create the best environment for economic activity to expand in the long term. In this perspective, the independence of the central bank was an additional institutional guarantee for keeping inflation under control.

In a seminal paper Barro and Gordon (1983) show that only an unanticipated monetary policy could affect real economic variables. There is a tradeoff between credibility and flexibility since the difference between output stabilization and price stability can be viewed as the main difference between rules and discretion. Therefore, the time consistent monetary policy is the one conducted in a discretionary manner, but evolves an inflation bias. Rogoff (1985) proposes to delegate the monetary policy to conservative and independent central banks in order to gain in credibility and reduce inflationary bias. Central bank independence is viewed as a means to mitigate an inflation bias that may arise under discretionary policy. In the 1980's Germany appears as a perfect example, Bundesbank independence guarantees price stability.

Empirical literature analyses the effect of central bank independence on macroeconomic performance (inflation and output levels and volatility). According to Alesina (1988) and Grilli, Masciandaro, Tabellini (1991) central bank independence is associated with lower levels of inflation. Cukierman et al (1992) show that legal independence is a significant determinant of price stability in industrial countries. Considering the effects of central bank independence on financial markets Alesina and Summers 1993 show that interest rate variability is decreasing with higher central bank independence and credibility.

These studies influenced political debate over the question of the independence of central banks, particularly in Europe at a time when discussions were up and running to define the objectives and operating conditions of the future European central bank. In Europe, the independence of the central bank was seen as a counterparty to Germany and the country's relinquishing of the Deutschemark. It was enacted by the Delors report, recommendation N° 52 of which proposed "to extend the scope of independence of central banks". In the Maastricht Treaty of European Union (February 7th, 1992), the protocol of statutes for the European system of central banks and the ECB included a convergence of statutes of national central banks. By virtue of article 14 of the protocol and article 108 of the treaty, States were required to watch compatibility between national legislation and the Treaty as to the question of the statutes of national central banks before the ECBS came into force. Member states in turn granted independence to their central bank (France and Italy in 1993...).

As in the 1930s, the relevance of the arguments put forward to advance the model of central banks is questionable. Certain empirical studies very clearly doubted the benefits of independence. Posen (1993) suggests that low inflation and central bank independence are both caused by a strong demand for the former, and further argues that increasing central bank independence will not itself lead to lower inflation. Campillo and Miron (1997) find that after controlling for other factors that may determine inflation, central bank independence is relatively unimportant for average inflation rates.

Indeed, at this period in time the independence of central banks appeared to be an expectation, even a command from the financial markets. The markets considered that the status of an independent central bank gave monetary policy greater credibility and token of permanence.

The model of the independent central bank finally won the day at the end of the 1990s when the Bank of England (1997) and the Bank of Japan (1998) went independent and when the ECB – one of the world's most independent banks – successfully introduced the euro. At the dawning of the 2000s, the era of grand moderation seemed to crown this movement.

2.4 Towards a new model?

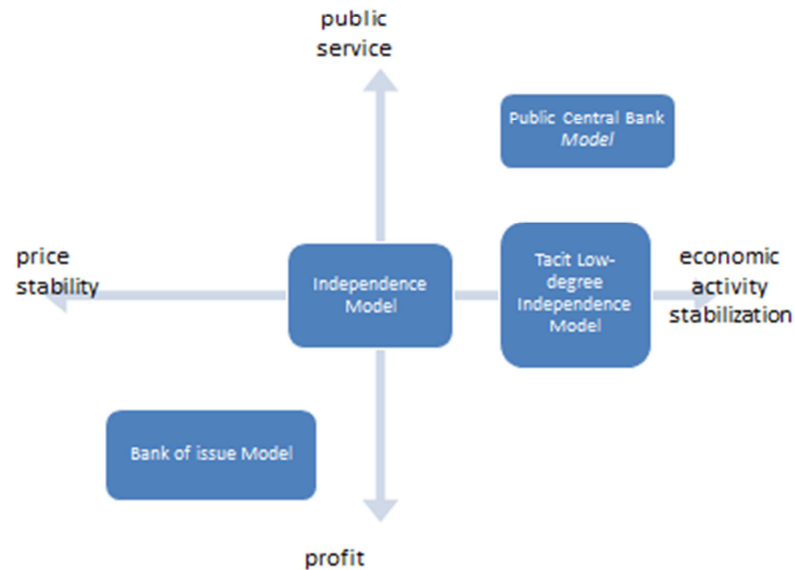
The different models of central banking analysed above (bank of issue model, public service central bank model, independence model of central bank) are originally positioned on the graph below inside a twin axis system.

What about arbitration rendered by central banks between the quest for price stability and the search for support for stabilization of economic activity?

What about the balance between the search for profit and public service but these institutions?

Further to subprime financial crisis of 2007-2009 and increasing of public debt ratio in most developed countries, central banks have intervened by way of original, particularly unconventional measures to help governments contain the rise in debt in order to prevent the consequences of a so hard fiscal adjustment on economic activity. In doing so, central banks have lost control over money supply and have desisted from inflation targeting. These events introduce probably a new age in central banking history.

Figure 1. Central Banking models in an historical perspective



The issue of the sovereign debt invites us to consider the generalization of a new model of central banking, de facto less independent; we purpose to qualify this model as a tacit low-degree independence model. The historical novelty lies with the fact that central banks have anticipated government expectations. They have integrated the necessity of participating in the reduction of public debt. In this, we can identify the fruit of the assimilation of the history of central banking, which shows that the balance of power with governments is, under such circumstances, inevitably unfavourable.

3. Central bank independence and sovereign debt: the end of central bank independence?

3.1 Economic theory background

In economic rhetoric, the Fiscal Theory of Price Level (FTPL) analyses the consequence of interactions between fiscal and monetary policies in terms of price levels and public debt through respect for inter-temporal budget constraint (Leeper 1991). The analysis of situation based on a Ricardian budgetary regime suggest that budgetary balance is a response to public debt dynamic in order to respect inter-temporal budgetary constraint without link with monetary authorities. The analysis of situations based on a non-Ricardian budgetary regime is more in phase with the period we live in. All else being equal within a budgetary regime of this type, the evolution of the primary balance is not compatible with a stable trajectory of debt. The presence of budget deficits can then testify to what budget policy decides without taking on board, *a priori*, long term respect for the sustainability of the

public debt. Two scenarii may then prevail, depending on the behaviour, the degree of independence of monetary authorities, and the perception thereof by the private sector.

If an independent central bank does not wish monetary policy to be just a simple correction of budget overruns, and subsequently if evolutions in monetary creation like those of the budget balance are determined independently of the evolution of public debt, respect for inter-temporal budgetary constraint can only come about by an adjustment of the general level of prices.⁸ Only a steep hike of the latter can effectively guarantee equality between the ratio of current debt to GNP and the sum of updated real values of budget balances, and the potential forthcoming creation of money (in terms of GNP). Under this radical configuration designated as the strong version of FTPL, the general level of prices is then determined by the conditions of balance of the market affecting the debt for each period. This is a quantitative theory of the debt, the empirical reality of which has not been established in historical perspective (Blancheton and S en egas 2003).

Yet private agents may feel that the compatibility between respect for inter-temporal budget constraint by the State and this “exogenous” evolution of primary balance should ultimately be assured by forced recourse to the creation of money in the form of direct, or indirect, advances. If such were the case, the central bank, by then supplying the means for monetary adjustment, will subject its behaviour, *de facto*, to that of the Treasury. In this configuration, the future rate of inflation can no longer be determined on the sole base of criteria defined by the authority in charge of monetary policy. Its value depends in part on the conditions of “sustainability” of the public debt. Here, we are talking about a so-called low version of the FTPL.

The original analyses from Sargent & Wallace 1981 revolved around this configuration. Initially, the budget authorities work with deficits to respond to what appears to be a necessity (war, rebuilding, crisis management). If an independent central bank maintains strict control over money supply to stabilize inflation in the short term, the public debt grows. Should budgetary expansion and monetary austerity be prolonged, when the debt has reached a threshold considered to be unacceptable by lenders, the central bank will be forced to monetize a part of this debt. In this case, wishing to avoid low inflation at the outset leads to higher inflation in the long term.

From the early 1980s, restrictive monetary policies conducted by often independent central banks bore high-level real rates of interest. Strict control over money supply persisted until the financial crisis of 2007. Budget deficits were financed through recourse to the growing level of public debt.

Recent papers suggest the reality of this analysis since the 1980s. According to Martin (2013), the increase in debt and reduction in inflation experienced in the US and in other developed countries in the early 1980s was plausibly the combined outcome of increased central bank independence and lower tolerance of inflation by agents.

3.2 Empirical approaches

Historically, the clearest links between debt, independence and prices come to light in times of war. As during WWI, dependent central banks may participate in the financing of the conflict. They may grant direct advances or purchase Treasury bonds directly, like the Bank of England. They may also re-discount public debt securities, like the Banque de France. Allegiance and debt here stand side by side and then contribute to soaring prices by virtue of a quantitative pattern. Under these circumstances, the public debt can paralyse monetary policy.

⁸ More precisely, with the inter-temporal budgetary constraint expressed in proportion of GNP, it is down to the aggregate nominal income to make the adjustment. The latter is made by the general level of prices if real income is set at its natural level.

In French case during and after WWI the Treasury's financial needs significantly paralysed the Banque de France's action via the traditional channel of discount rate during and after the conflict. The rise in the rate of National Defence Bills effectively appeared to result in a raising of the interest charge served with public securities, something the State wished to avoid in order to make its debt more easily bearable. Additionally, and at a time when the floating debt was high, agents could also have attempted to meet their liquidity needs not through discount but via a demand for reimbursement of public securities: such a move would have incurred a serious risk of suspension of payment at the Treasury. In the 1920's French monetary policy gave the impression of being dominated and passive (Blancheton 2012). The ascertaining of the monetary base was then, to a large extent, endogenous to variations in the demand for Treasury securities. The Banque de France had lost control over the money market.

Recently using an analytical framework to compare an independent central banking arrangement and a centralized one where a government chooses both monetary and fiscal instruments Ozkan et al (2010) show that central bank independence leads to a higher public debt equilibrium and therefore raises the cost of borrowing. By using panel data analysis for 22 developed countries (included European countries during convergence process) from 1992 to 2000 Papadamou et al (2012) show that a high level of independence may significantly affect the effects of a series of macroeconomic variables on the insurance of government bonds and government debt. The higher is the level of central bank independence, the less the monetisation of the debt. The government meets its debt obligations by issuing new debt, increasing thus deficit. That means that countries are more dependent on their fiscal decisions than others with lower levels of central bank independence. In conclusion countries are more affected by market conditions the higher is the level of central bank independence.

In appendix we try to establish basically the link between legal central bank index between 1980 and 1989 and public debt on gdp level in 1989 for 21 countries. We use Cukierman, Webb and Neyapti (1992) index of independence in the 1980's and two sources for public debt (Reinhart and Rogoff database in Figure 2 and a mix of different international and national sources in Figure 3). Conclusions are the same: any link can be established between legal central bank index and public debt level in the 1980's.

Recently the subprime crisis could be said to have unveiled the difficulties of debt sustainability, to have prompted central banks to take unconventional measures and ultimately enacted inflation targeting. Central banks are seemingly entering a new era and should be participating in the liquidation of the public debt. Concerning Fed Meltzer observes "never before had it expanded its balance sheet by hundreds of billions of dollars or more ever on short period" (2009, 1243). Either they anticipate this necessity, as seen with the Fed or the ECB, keeping one step ahead, or they will be forced to do so after a period of time. In Europe, LTRO programmes rolled out in particular to lower interest rates on sovereign debt seem to have been implemented without explicit political pressure. The declaration by M. Draghi on the 6th of September, 2012, again seems to have been made prior to any pressure despite the contrasting reactions it triggered at the time: beyond his core mandate, he evoked the possibility for the ECB to buy unlimited quantities of State bonds with a maturity of 1 to 3 years, to ease tensions on interest rates.

Conclusion: a move towards tacit low-degree independence

By taking an historical perspective, the article has shown the swift and profound changes that have affected the independence of central banks. De jure independence is never a fixture, statutes are never set in stone. De facto independence evolves, so to speak, permanently in pace with structural changes to the economy, monetary and financial innovation, and the personalities of the highest-ranking officers.

Over and above the diversity of national situations, different models of central banking have come and gone since the end of the 19th century: from bank of issue to public central bank to independent central bank. These movements in central banking are associated with heavyweight structural transformations to capitalism affecting the role of the State and the more or less firm belief in the efficacy of market mechanisms to effectively allocate resources. The paper analyses each model and proposes an original positioning on the graph inside a twin axis system. The first one concerns arbitration rendered between the quest for price stability and the search for support for economic activity. The second refers to the balance between the search for profit and public service.

The article sets out to show that a new model is beginning to take shape. Further to the financial crisis of 2007-2009 and growth in the public debt, central banks have intervened by way of original, particularly unconventional measures to help governments contain the rise in debt. In doing so, they have lost control over money supply and have desisted from inflation targeting. As a result, de facto independence has waned.

The historical novelty lies with the fact that central banks have anticipated government expectations. They have “endogenized” the necessity of participating in the liquidation of public debt. In this, we can see the fruit of greater transparency that has helped develop the capacity of central banks to sit up and listen, and the assimilation of the history of central banking, which shows that the balance of power with governments is, under such circumstances, inevitably unfavourable.

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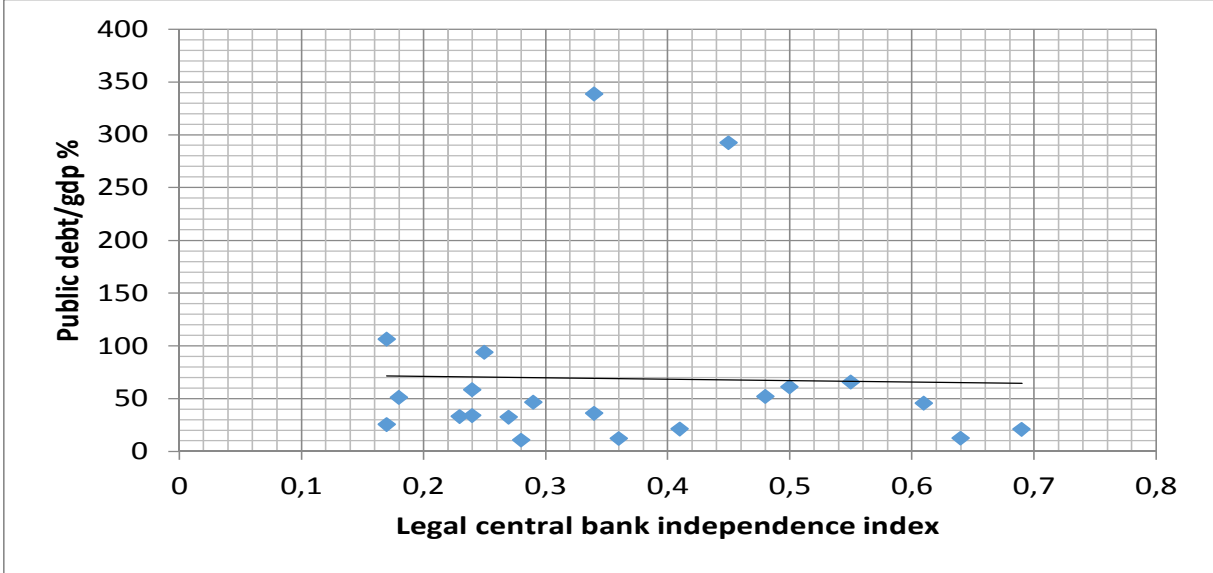
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Appendix

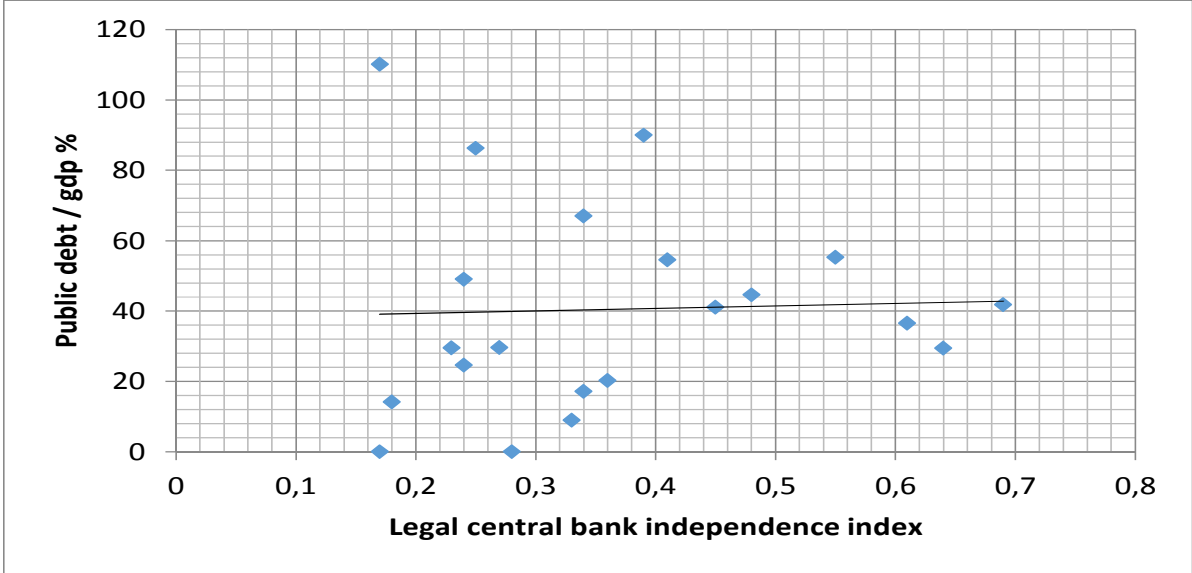
We try to establish the link between legal central bank index between 1980 and 1989 and public debt on gdp level in 1989 for 21 countries using different sources for public debt ratio.

Figure 2 Legal Central Bank independence and public debt ratio in the 1980's



Sources: Cukierman, Webb and Neyapti (1992) for legal central bank index between 1980 and 1989, Reinhart and Rogoff database for public debt ratio in 1989. 21 countries : Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, US,

Figure 3 Legal Central Bank independence and public debt ratio in the 1980's



Sources: Cukierman, Webb and Neyapti (1992) for legal central bank index, various references for national public debt ratio (economywatch or official government website) . 21 countries : Australia, Austria, Belgium, Canada, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, New Zealand, Norway, Portugal, Spain, Switzerland, UK, USA.

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