



**HAL**  
open science

## A Universal Paradigm of Central Banker?

Frédéric Lebaron

► **To cite this version:**

Frédéric Lebaron. A Universal Paradigm of Central Banker?: An Inquiry Based on Biographical Data. Social Glance. Journal of Social Sciences and Humanities, 2012, 1 (1), pp.40-59. hal-00842086

**HAL Id: hal-00842086**

**<https://hal.science/hal-00842086>**

Submitted on 7 Jul 2013

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

## A Universal Paradigm of Central Banker?

### An Inquiry based on Biographical Data

Frédéric Lebaron<sup>1</sup>

#### Introduction

At first sight, it seems that there is a universal model of central bankers. Defined here as “chairmen”, “governors”, “deputy governors” and –more generally- members of monetary policy councils, central bankers are in majority PhD holders, economists, specialized in money, banking, macroeconomics or econometrics. They have either been working at the central bank, in private banks, financial institutions or at the university before joining the main decision making body of monetary policy, after being appointed in general by a governmental authority.

The economic institution called “central bank” exists everywhere in the World, from the United States to North Korea and Zimbabwe<sup>2</sup>. Various “concrete” central banks at least apparently share similar goals: providing money to financial and (at least indirectly) economic actors, whatever their juridical structure and relationship to political powers; maintaining “price stability” or financial.

Central bankers also share a common general doctrinal framework: strongly influenced by neoliberalism and in particular by monetarism, they put the emphasis on the monetary causes of inflation and on the need for appropriate “rules” in the conduct of economic policies; they believe in central bank “independence” from political powers as an institutional condition to achieve price stability, and even to provide financial stability. They are strongly attached to market mechanisms in the various sectors of the economy, especially finance provided, that they are (to their own view) properly regulated.

They even seem to share their main set of theoretical and practical tools: “Taylor rules” (a statistical equation which relates interest rates, inflation and growth, and is used to define the level of interest rates), “dynamic stochastic general equilibrium” (DSGE, a specific type of macroeconomic modeling), “inflation targeting”, etc. They, above all, share a common discourse over monetary and financial stability, conceived as the basis for a sound growth and a balanced socioeconomic dynamics.

Of course, they may diverge on particular and specific issues like the relevance of certain tools or actions in particular contexts, or on the relevance of rising or not interest rates in specific situations.

---

<sup>1</sup> Frédéric Lebaron is professor of sociology at the University of Picardie-Jules Verne, head of the Centre universitaire de recherche sur l’action publique et le politique – épistémologie et sciences sociales (UPJV-CNRS, UMR 7319).

<sup>2</sup> Pringle ed., 2009.

There are what the journalists call “doves” and “hawks” among them. But, they may diverge in a common space of debate and in a common language.

### A comparison between four central bank committees

Table 1

#### Demographic and macroeconomic indicators

	<b>Population 2009</b>	<b>GDP / inh. PPP 2010</b>	<b>Balance on Current Account 2010</b>	<b>Real GDP growth 2010</b>	<b>Inflation 2010</b>	<b>Gross debt 2010</b>
<b>USA- Fed (FOMC)</b>	311	47.284	-3.2	+2.8	+1.6	91.6
<b>Eurozone- ECB (GC)</b>	330	32.696	0.1	+1.7	+1.6	85.0
<b>Japan – BoJ (PC)</b>	127	33.805	+3.6	+3.9	-0.7	220.3
<b>China – PBC (MPC)</b>	1 324	7.519	+5.2	+9.9	+3.3	//

Source : IMF, UN, 2011.

In this article, we discuss the hypothesis of the existence a *universal model of central banker* on the basis of the social properties of central bank leaders, especially their educational and professional backgrounds in line with Pierre Bourdieu's sociological theory of fields (Bourdieu, 1992). Our analysis is mainly based on a comparison between four monetary councils ("committees") of central banks, applying a Geometric Data Analysis methodology (Le Roux, Rouanet, 2004, 2010) on biographical data.

We first construct a space of central bankers. We, then, proceed to a comparison between central bank committees. This allows us to discuss the importance of the observed differences to understand central bank's strategies and behaviour<sup>3</sup>.

In a first time, our investigations are focused on four central banks, among the more than 150 listed by central banks professionals: the Federal Reserve Bank of the United States (FRB), the European Central Bank (ECB, which is the central bank for 17 countries of Europe since January 2011, including Germany, France, Italy and Spain), the Bank of Japan (BOJ) and the People's Bank of China (PBC).

These four central banks govern the main currencies, and correspond to the four most national (or "regional", in the sense of "supranational") preeminent economies (representing 20 countries and around one quarter of the World population, a bit less than 2 billion people), and especially as regards production and international trade.

The multiple interactions between these four economic spaces, financial zones and international currencies contribute to shape the global economic field, especially since the emergence of China as a major economic power in the 1990s and 2000s (Arrighi, 2007). It is obvious if we think of the commercial interdependence between the United States and the People's Republic of China, but also between Japan and the United States. With the growing role of the "G20" since the post-2007 financial crisis, the coordination between these institutions has even become a major stake for the global economic order, the stability of exchange rates, and other major World economic issues (see for example the "Stiglitz report" of 2010: Stiglitz, 2010).

The four central bank committees studied here are the public policy "units" in the global monetary field: the Federal Open Market Committee of the Federal Reserve System, the Governing Council of the European Central Bank, the policy council of the Bank of Japan, the monetary policy council of the People's Bank of China. The justification for this choice is derived from Bourdieu's notion of "efficient agents" in the field, namely the agents which by their action produce the structure of the global economic field<sup>4</sup>.

The move towards the structure of "monetary committee" as the main decision instance has been underlined by various scholars in recent studies (Blinder, 2004). But if they seem to share some

---

<sup>3</sup> We can add other central banks in the analysis as supplementary elements: this will be the object of another article.

<sup>4</sup> There are also more pragmatic reasons for choosing these four banks to construct a "reference-space": accessibility of biographical data, etc.

Frédéric Lebaron, A Universal Paradigm of Central Banker ?. An Inquiry based on Biographical Data.  
Social Glance Vol.: 1 Issue : 1 Oct-Dec. 2012, pp. 40-58.

common features, they also profoundly differ as regards their institutional settings, functions and general characteristics.

Table 2

Historical and institutional frames of the committees<sup>1</sup>.

	Date of creation	Ownership	Legal status of the committee	Number of members of the board	Appointment of the chairman and the members	Term	Turn-over (N chairmen between 1999-2011)
<b>USA- Fed (FOMC)</b>	Fed. Res. Act 1913	District banks: combining public and private elements	Independent, Federal. Multiple objectives.	12 (7 governors + NY Fed Pres+ 4 rotating District Bank Presidents)	Board members : president. Presidents of DB: elected by the board of directors.	Board: 14 years. Chairman and vice-chairman: 4 years.	2
<b>Eurozone- ECB (GC)</b>	1999 (Maastricht Treaty, 199)	Most of the national central banks: 100% state	Independent, Federal, centered on price stability.	23 (6 executive board members+17 presidents of central banks)	President and EB: European Council Governors: national authorities	The 6 members of the Executive Board of the ECB are appointed by the Council of Europe for 7-year terms	2
<b>Japan – BoJ (PC)</b>	1882. Revised in 1998.	55% state, 45% private shareholders	Independent, authority to formulate monetary and credit policies	9	Appointed by the cabinet and consented by the Diet	5 years	3
<b>China – PBC (MPC)</b>	1948. Committee 1997. Reform 2003	100% state ownership	Under the guidance of the State Council. consultative body.	12*	Appointed by the President	No specific term	2

<sup>1</sup> The Monetary Policy Committee is composed of the PBC's Governor and two Deputy Governors, a Deputy Secretary-General of the State Council, a Vice Minister of the State Development and Reform Commission, a Vice Finance Minister, the Administrator of the State Administration of Foreign Exchange, the Chairman of China Banking Regulatory Commission, the Chairman of China Securities Regulatory Commission, the Chairman of China Insurance Regulatory Commission, the Commissioner of National Bureau of Statistics, the President of the China Association of Banks and an expert from the academia

## The data

The data are biographical data, coming from various official and less official sources, like CVs found on official Websites, directories (*Who's Who in the World, in Central Banking, China Vitae...*), Central Banks observers' Websites, etc. We had to transform rich qualitative information into coded (thus simplified) properties. But it is always possible to come back to the detailed biographical information with the use of GDA techniques like supplementary elements. Specific methods allow us to tackle the problem of incomplete information.

As active individuals, we have taken all the members of the four committees from 1<sup>st</sup> January 1999 to 1<sup>st</sup> January 2011. Newcomers after 2011 can be projected as supplementary individuals.

We have n=140 members as active individuals, among whom 44 for the ECB, 42 for the Fed, 42, 21 for the BoJ, and 33 for the PBC. 9.3% are women, 55% have a PhD, and 35.7% only were born in the 1950s-1960s (the youngest).

## The space of central bankers: a geometric model

In order to construct a model of this field, we turn to Geometric Data Analysis, which can be seen as a way to formalize the notion of field as Pierre Bourdieu developed it (Lebaron, 2009). We define a field as a sub-social space, characterized by a particular configuration of resources at stake, competition and cooperation between agents, a specific domination process, etc. We insist on the multidimensionality of the capital species at stake.

We mean here "formalize" in a strict sense: with the choice of active questions, we define the main properties, that is resources, which we think are at stake in this field. The construction of the space of central bankers consists therefore in a geometric modeling of the biographical characteristics which are seen as relevant in the field. The operation of coding is a central step of the statistical analysis.

In the case of central bank committees, we can analyze the space of monetary policy decision-makers as an intersectional field, i.e. a field at the intersection of other fields, which relates to different academic domains (economics, management, law, etc.) and to different professional sectors: the university, the field of finance (private and public), the bureaucracy (ministry of finance, etc.), the political field, the field of central banks itself. A position at the top of central banks may be related to various sorts of resources, professional career patterns and biographical trajectories. This is even a precondition for their functioning as what Bourdieu and Boltanski (Bourdieu and Boltanski, 1976) call "neutral places", which means places, where different fractions of the ruling class interact.

Each of these fields and sectors is the place of an accumulation of specific capital, mainly educational, scientific, political, social (networks) and symbolic: various types of legitimacy are at stake in the field of central banking.

## Specific MCA

To construct the space we use Specific Multiple Correspondence Analysis. This technique allows treating missing values and too rare modalities as “passive” categories (which do not take part to the construction of the space).

This method helps us to take into account the multidimensionality and complexity of trajectories (career patterns) and resources at stake.

We have here Q=10 questions and K'=29 active modalities:

3 questions and 9 active modalities are centered on education.

- *Level*: PhD/Master/Bachelor and Other/NA\*;
- *First field*: Economics/Law/Management/Science\*/NA-Other\* ;
- *Studies abroad*: No/USA/UK/Other\*/NA\*)

7 questions and 20 active modalities are centered on career patterns

- *Main career*: Central Bank/Financial administration/Other administration/Politics/University-Research/Banks-Private Finance/Other corporate ;
- *Position in CB* (2) ;
- *Position in Finance* (2);
- *Position in Private sector* (2);
- *Position in Administration* (No/National/International);
- *Position in university* (2);
- *Position in political field* (2).

The 10 questions (29 active modalities) describe with a certain simplicity the educational trajectory (level and field, 3 questions representing 9 modalities), and the professional career (7 questions, 20 modalities). This is what I will call the geometric model of the four committee members.

## Results of the specific MCA

The main results of the specific MCA are the following.

**Table 3**

**Results of the specific MCA**

	Axis 1	Axis 2	Axis 3	Axis 4	Axis 5
Eigenvalue	0.2875	0.2132	0.1850	0.1578	0.1474
Rate of variance (%)	14.96	11.09	9.63	8.22	7.67
Modified rate (%)	52.26	20.66	12.46	6.49	4.70
Cumulated modified rate	52.26	72.92	85.38	91.87	96.57

Three axes are kept, following the usual criteria.

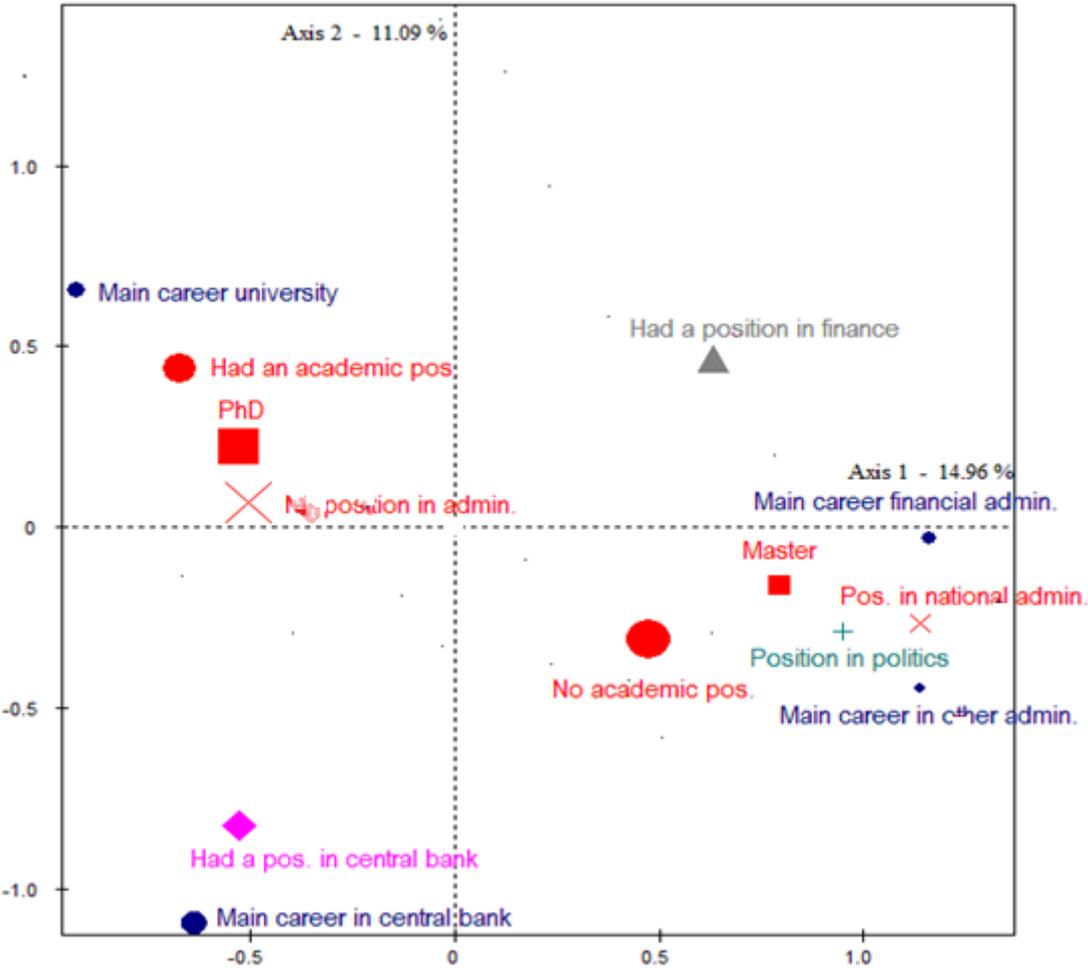
## Interpretation of axes

### Axis 1

Axis 1 opposes on the positive side position in national administration, main career in financial administration, Master, position in politics, career in finance, had a position in finance, no academic position to no position in administration, PhD, main career in the university, had a position in the university, had a position in the central bank, main career in the central bank on the other side.

This axis clearly relates to the existence of different models of “monetary excellence”: on one side, the predominantly academic dominant model of central banker, on the other side a model which is rather far from this international US-defined norm of central banking, and much closer to a politico-bureaucratic conception of central banking, still important in many parts of the World.

Specific MCA. Most Contributing Modalities on Axis 1



Axis 2

Axis 2 opposes on the positive side position in private sector, no position in central bank, main career in non-financial company, had a position in finance, in the university to main career in central bank, had a position in central bank, no position in private sector.

This axis opposes “insiders” and civil servants to actors coming from the economic field, finance or the university and other sectors. It confirms the importance of an internal legitimacy, acquired by a career inside the central bank, against a more “external” type of legitimacy. This opposition is doubled by an opposition between public and private trajectory, which corresponds to a central divide (the “summa divisio”, which is also important inside the field of central banking).

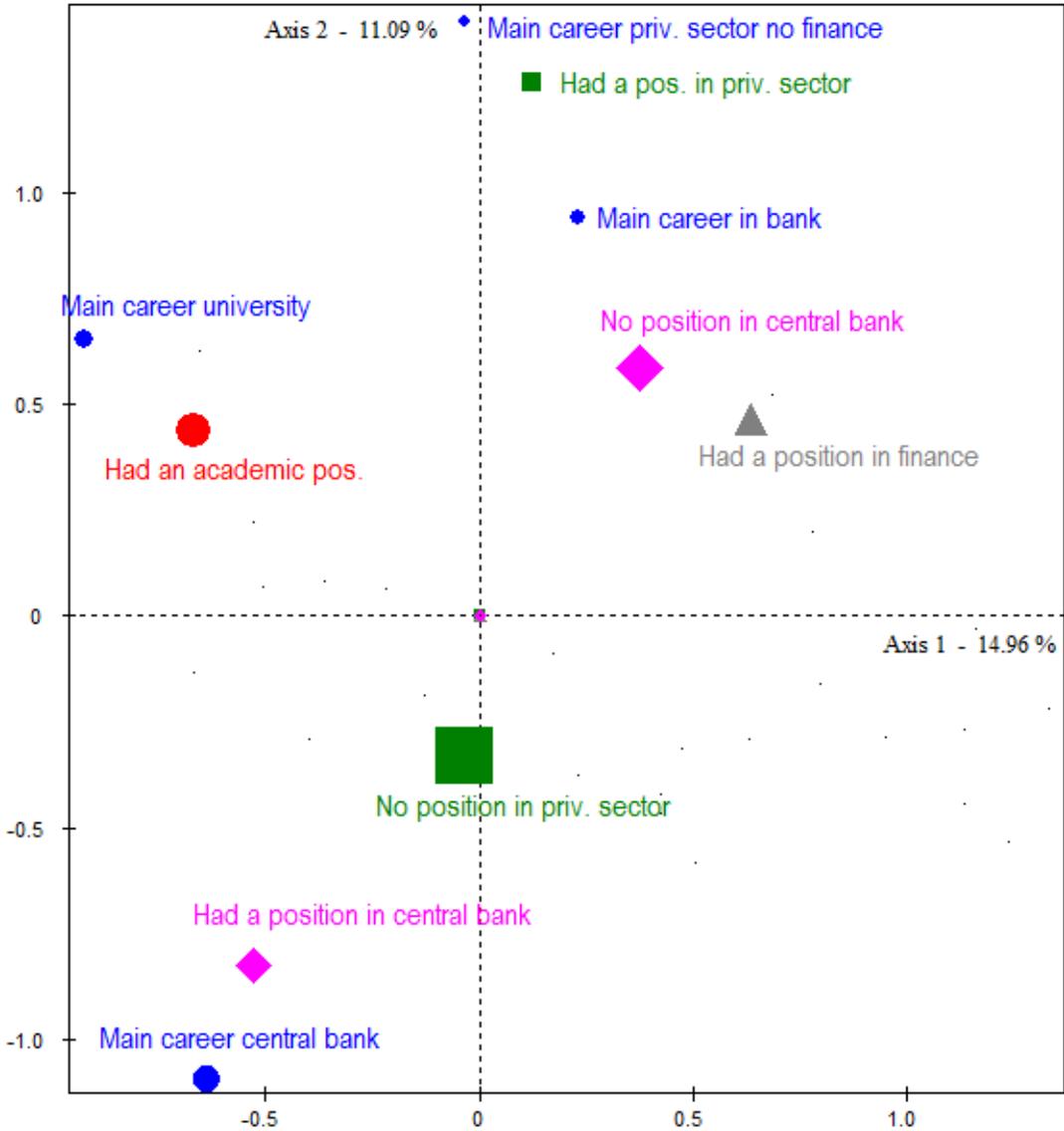
To sum up, Axis 2 opposes an *internal* versus an *external* legitimacy, and secondly *public* versus *private* forms of professional and social capital. The more or less close relationship with private interests, especially banks, is a major stake in this particular field, with many examples of “too close” relationships during the recent years.

**Axis 3**

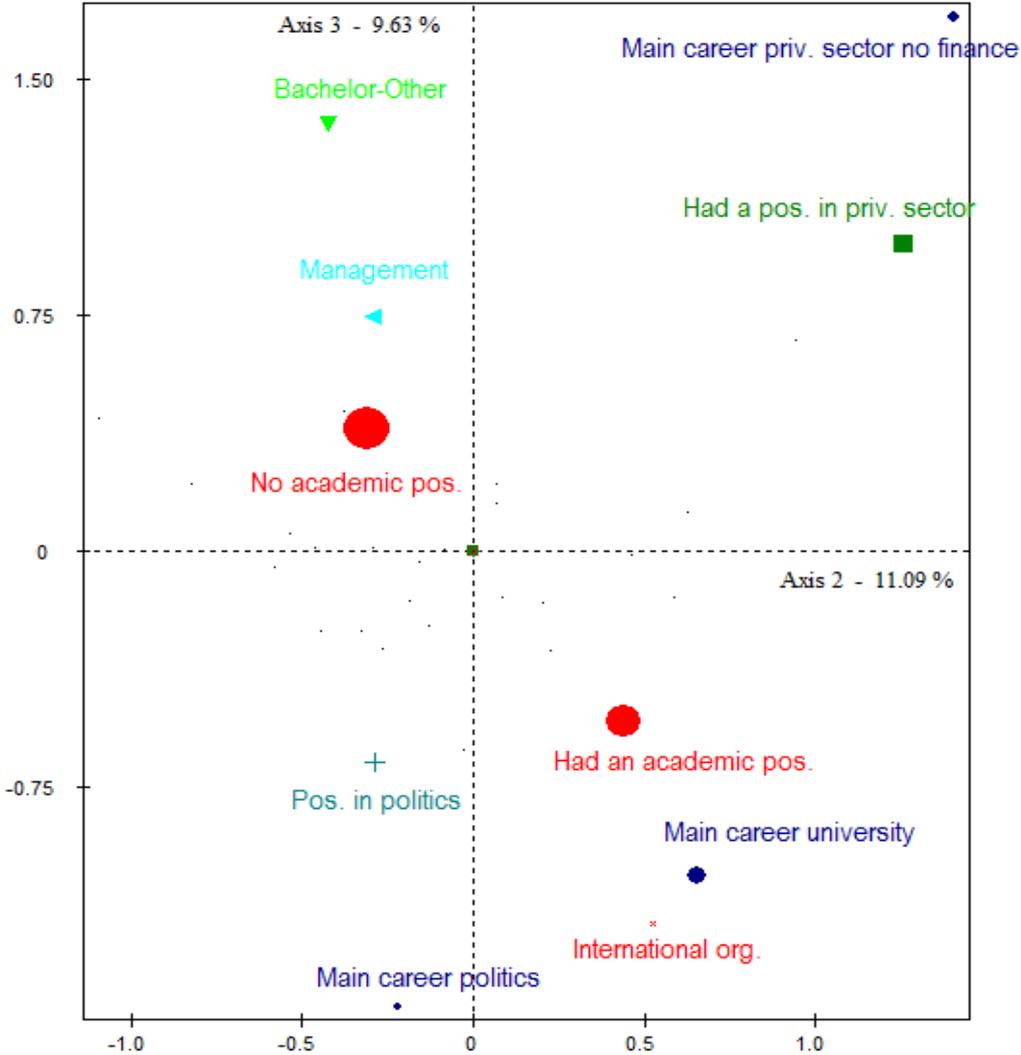
Axis 3 opposes on the positive side main career in non-financial private sector, bachelor, management and other private sector to modalities related to politics, university and international organizations.

This axis appears specific for industrial company profiles opposed to political-academic ones.

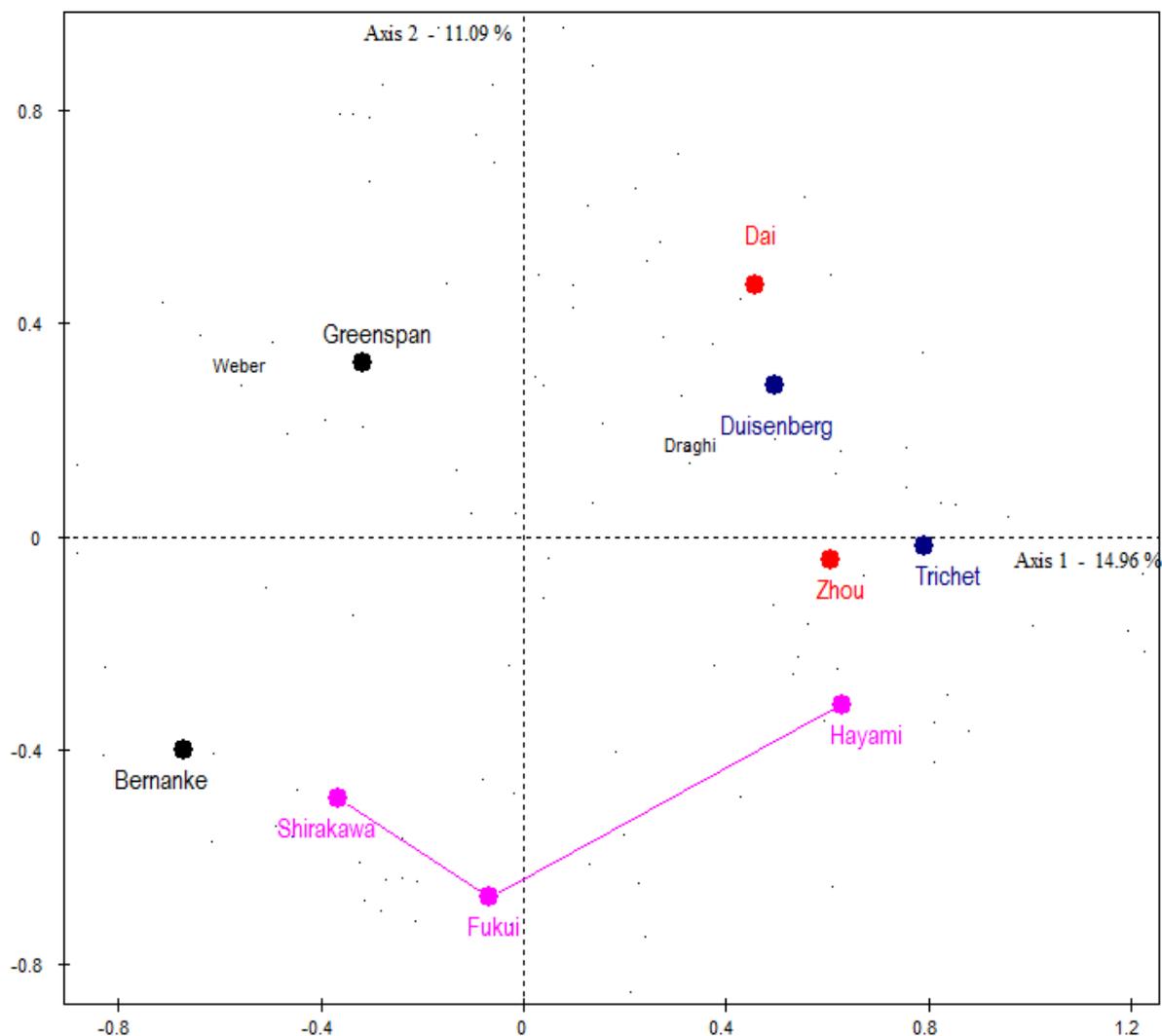
**Specific MCA. Most contributing modalities for Axis 2**



### Specific MCA. Most contributing modalities on Axis 3



## Cloud of individuals. Chairmen in the global space. (1-2)



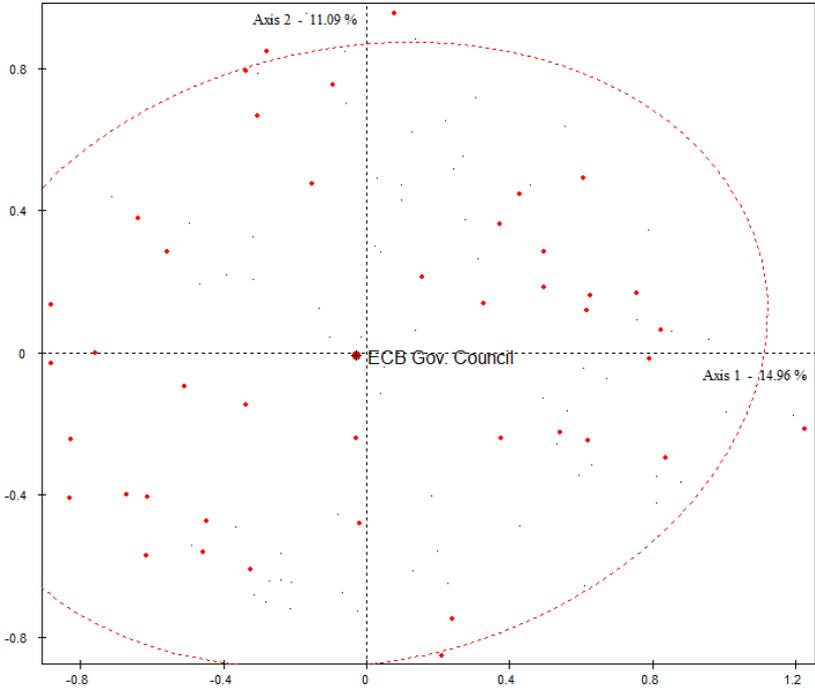
In the cloud of individuals, we see that heads of the central bank in the four committees are situated in different sectors of the space: on the left hand side as regards the American leaders (the more “academic” pole of the space), on the right hand side for Chinese and Europeans (more politico-bureaucratic), and down below for Japanese (with a move towards the left across time).

### Are there differences between committees of central bankers?

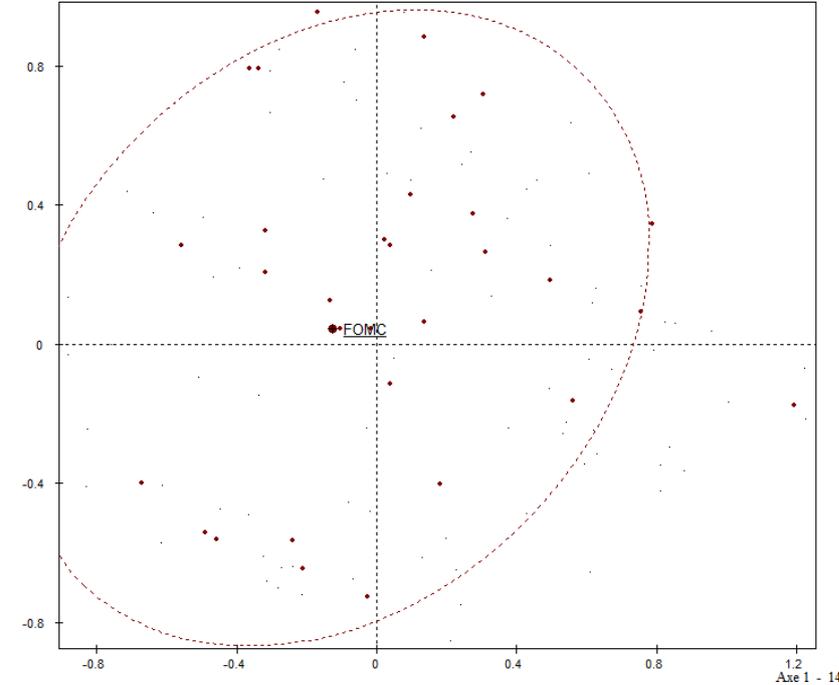
To discuss this issue, we first present the sub-clouds defined by the membership to each committee in planes 1-2 for the ECB, the Fed and the PBC, in plane 2-3 for the BoJ. We see that the shapes of the ellipses of concentration are different: the ECB and the Fed are centered close to the origin and

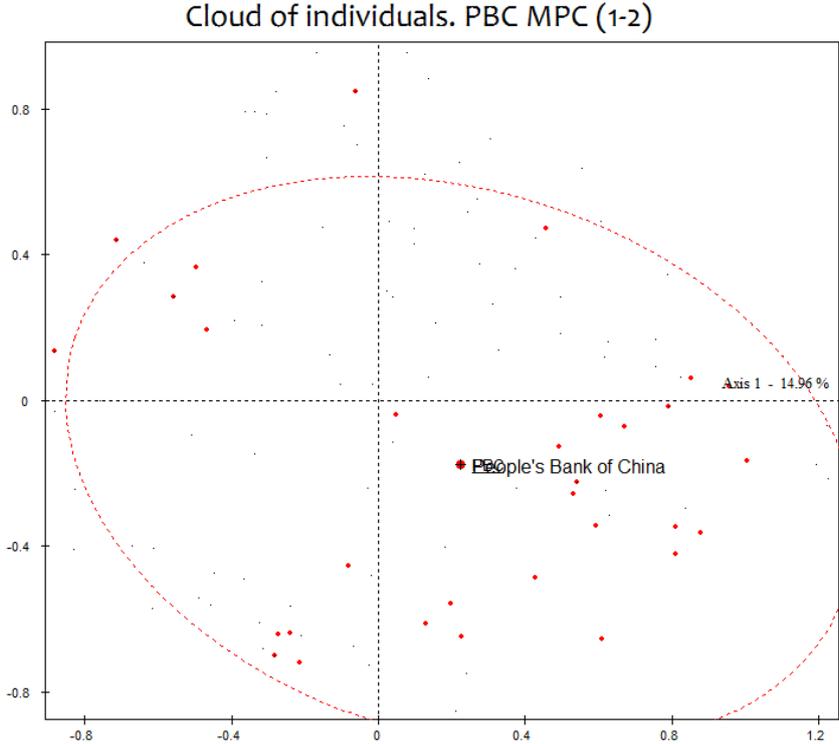
scattered in the plane, whereas the PBC is elongated along axis 1, and the BoJ much located in the North-East quadrant of plane 2-3.

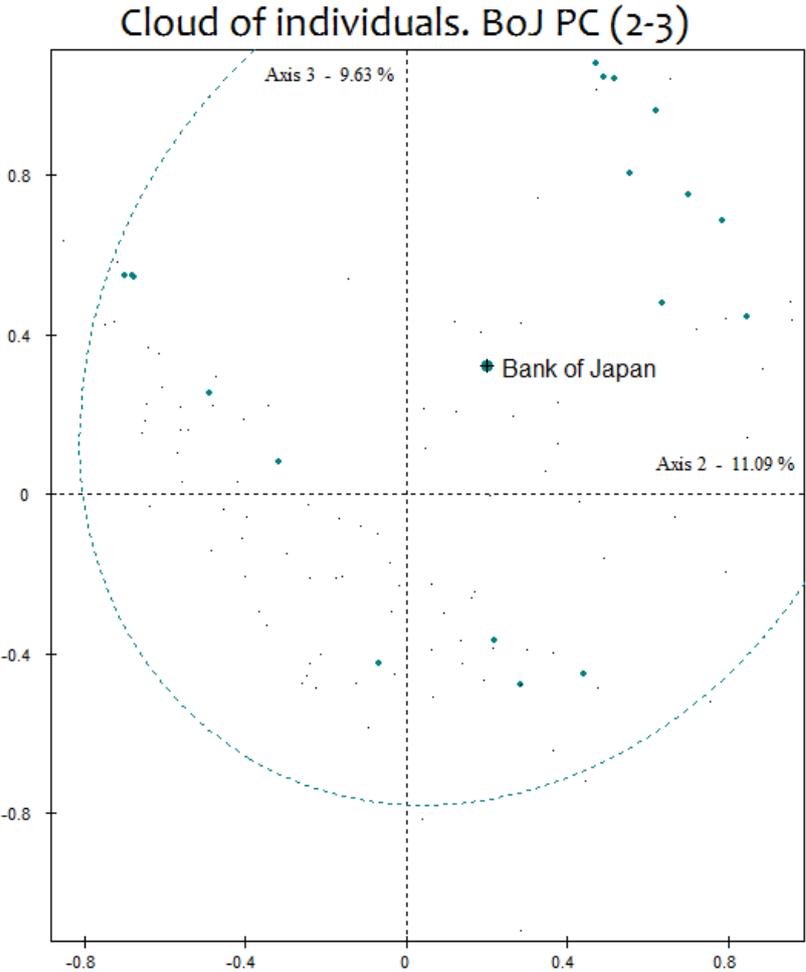
Cloud of individuals. ECB GC. (1-2).



Cloud of individuals. Fed FOMC (1-2).







The main part of the variance is not explained by the differences between the four banks as show table 4. The overlapping is very high between the four committees.

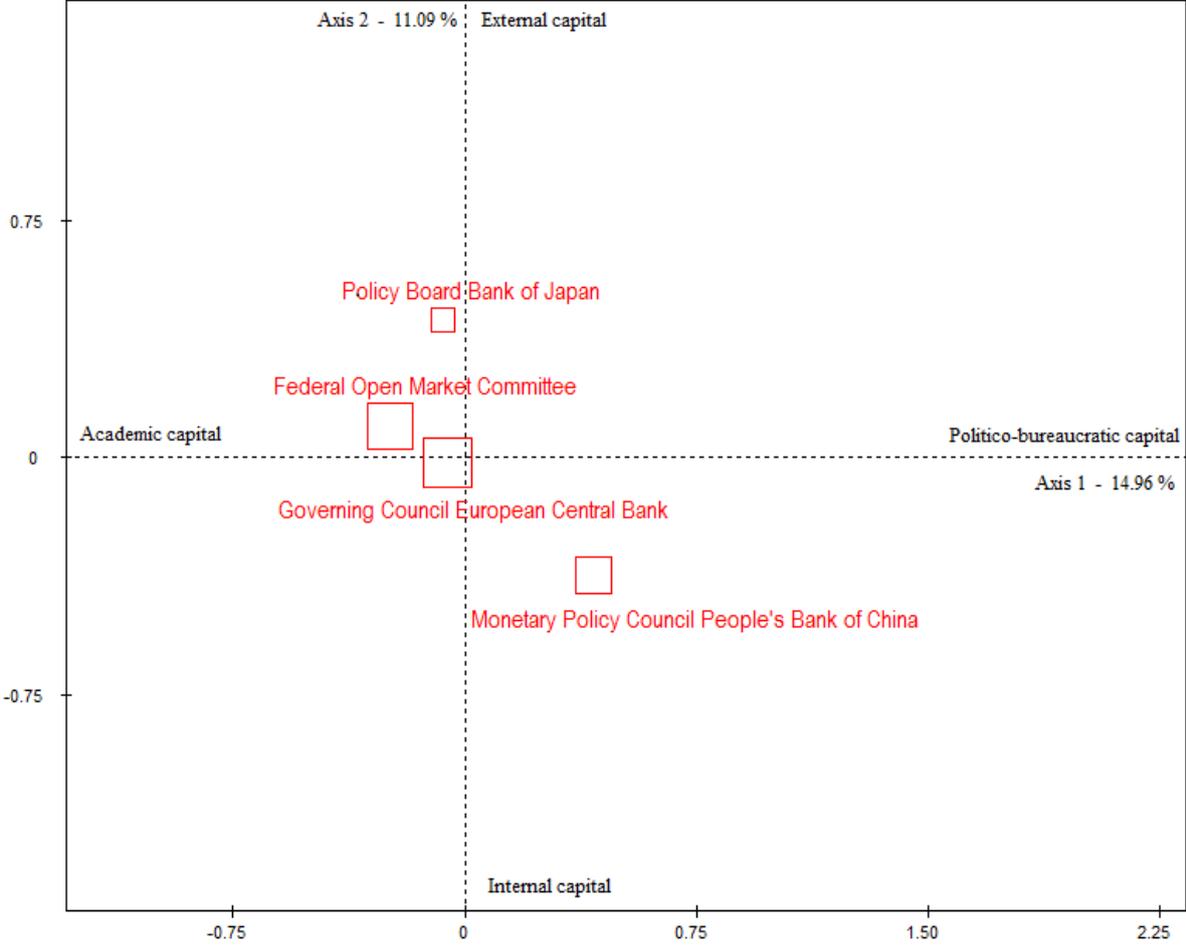
Table 4

Double breakdown of variance of the variable “central bank”

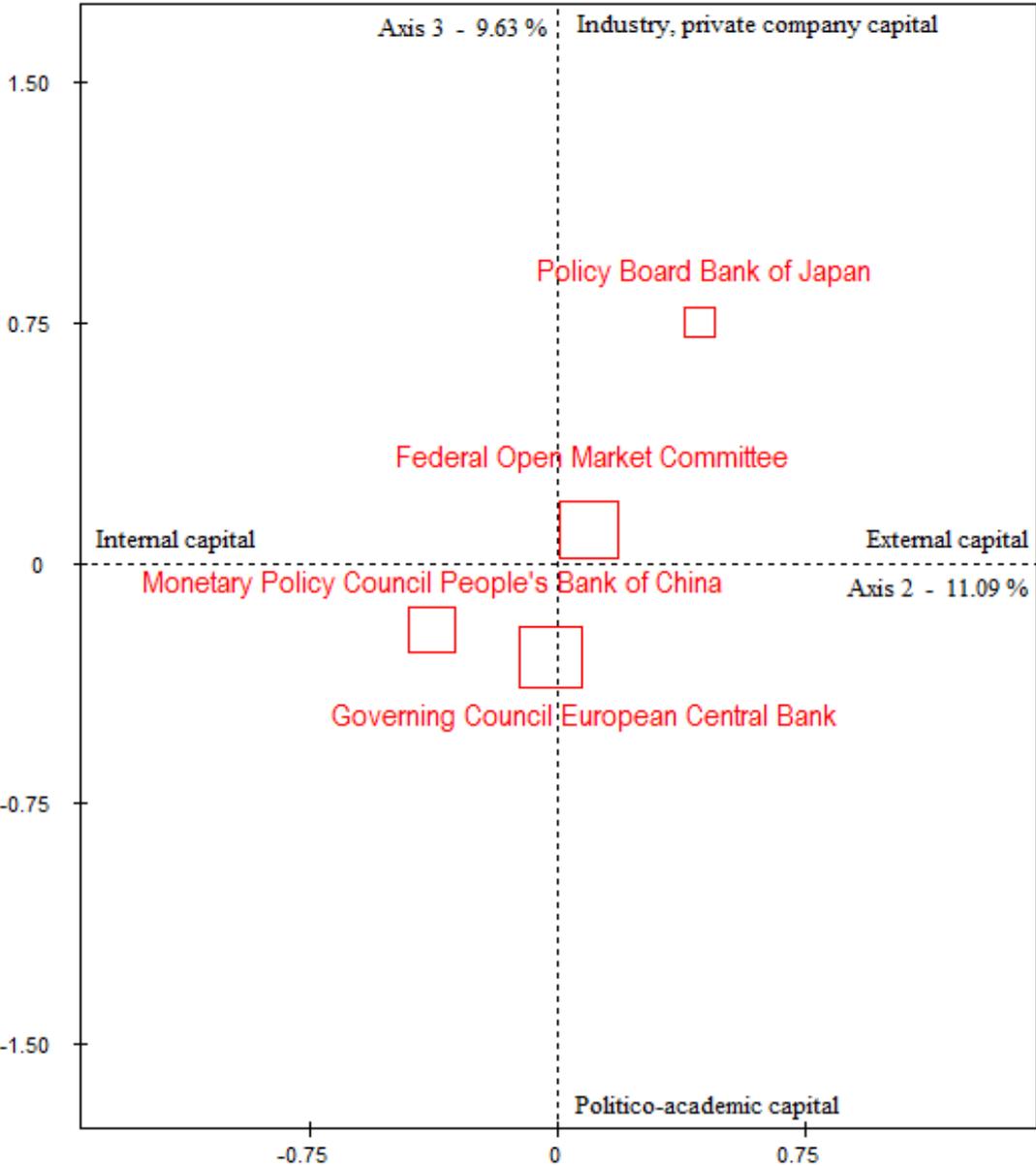
Axis 1			Axis 2			Axis 3		
between	within	between/ total	between	within	between/ total (in%)	between	within	between/ total (in %)
0,0170	0,2700	<b>5,98</b>	0,0140	0,1990	<b>6,49</b>	0,0230	0,1620	<b>12,46</b>

In what follows, a “notable” difference is defined by a deviation from the mean-point greater than 0.4 in the cloud of modalities (scaled-deviation); a deviation greater than 0.8 is defined as “large”. Central bank committees (4 modalities: Fed, ECB, PBC, BoJ) are used here as supplementary variables.

### Committees as supplementary elements (1-2)



### Committees as supplementary elements (2-3)



We first analyze differences with the mean-point (which is mathematically equivalent to a comparison between each bank and the three others), then differences between central banks.

Table 5.

Coordinates of the central banks

Member of...	Weight	Axis 1	Axis 2	Axis 3
Fed-FOMC	42	-0.24	+0.10	+0.10
ECB-GC	44	-0.06	-0.02	-0.29

BoJ-PC	33	-0.07	<b>+0.43</b>	<b>+0.75</b>
PBC-MPC	21	<b>+0.42</b>	-0.38	-0.21

Following our criteria, only the Chinese central bank differs descriptively from the mean-point on the first axis, and the Japanese on the second and third axes (in bold in the table).

Then, we analyze the differences between couples of banks. On the first axis, the difference between the Chinese and each of the other central banks is notable (from 0.66 with the US central bank to 0.49 with the Japanese and 0.48 with the ECB). On the second axis, the deviation between the Chinese and the Japanese central banks is even large (0.81). The deviation between the Japanese and the European is notable (0.45), as is the deviation between the Chinese and the US (0.48). On the third axis, the deviation between the Japanese bank and each of the others is notable, and even large in the case of the European (1.04) and the Chinese (0.96) central banks. The deviation between the Chinese and the European is notable (0.50). The deviation between the European and the US is almost notable (0.39).

Descriptively, we can conclude that differences appear in the space of central bankers. The Chinese central bank is clearly different on the side of politico-bureaucratic capital as opposed to academic legitimacy, more valued in the other central banks. The Japanese central bank is different as a central bank where an “external” legitimacy, which has been accumulated in the economic field (companies), is more important as opposed to the “insider” legitimacy of the central banker, who has made his/her care. On the third Axis the Japanese strong specificity is related to the importance of the private sector and especially of industrial actors, trained in management and with a lower level of education, to a more academic-political pole, which is more typical of the European Central Bank.

### Central banks crossed with time-period

Crossing the two supplementary variables Committee and time-period, we observe some interesting phenomena which relate to time (tables 6.a. to 6.c.).

Table 6.a.

#### Central banks in 1999-2002

Member of... in 1999-2002	Weight	Axis 1	Axis 2	Axis 3
Fed-FOMC	23	-0.31	+0.25	+0.34
ECB-GC	23	+0.01	-0.02	-0.26
BoJ-PC	9	+0.04	+0.23	+1.07
PBC-MPC	10	+0.87	-0.53	+0.14

Table 6.b.

Central banks in 2003-2006

Member of... in 2003-2006	Weight	Axis 1	Axis 2	Axis 3
Fed-FOMC	28	-0.27	+0.14	+0.14
ECB-GC	29	-0.05	-0.12	-0.38
BoJ-PC	10	+0.15	+0.38	+0.55
PBC-MPC	19	+0.87	-0.60	-0.24

Table 6.c.

Central banks in 2007-2010

Member of... in 2007-2010	Weight	Axis 1	Axis 2	Axis 3
Fed-FOMC	27	-0.25	-0.10	-0.05
ECB-GC	29	+0.04	+0.02	-0.39
BoJ-PC	14	-0.17	+0.29	+0.69
PBC-MPC	24	+0.27	-0.42	-0.27

If this study first confirms the global stability of the field during the 2000s, it also shows some small interesting movements: on the first axis, the Chinese central bank clearly tends to converge with the other central banks during the last period, which indicates that a process of “academization” is occurring (which can also be seen as an internationalization or “Americanization” process).

A second interesting observation is the fact that the specificity of the Bank of Japan also seems to have diminished on the three axes, between the first period and the two others.

A third observation concerns the global difference between the ECB and the FRB. It was at its highest (for all the axes) in the first period and has diminished since then. The deviation was notable (0.60) on the third axis in the first period, and also in the second period (0.52). Although the ECB has experienced an enlargement (from 11 to 17 countries), the changes seem to have been more important at the FRB than at the ECB. Though, no change across time is notable according to our criteria for each of the central banks taken separately, out of the converging process at the PBC for the first axis.

One must add here that internal differences may exist inside the ECB, between the Executive Board Members and the chairmen, at the FRB between the Governors and the (rotating) presidents of District Banks. This is clearly the case for axis one as regards the ECB, the members of the executive board being closer to the academic pole (table 7).

Table 7

	Weight	Axis 1	Axis 2	Axis 3
ECB – CB Presidents	33	+0.08	-0.03	-0.27
ECB – Executive Board	11	-0.46	+0.02	-0.36

## Conclusion: From Individuals to Collective Strategies and Economic Outputs

To conclude, we will briefly discuss the possible relations between the characteristics of individuals - seen as social agents, defined by their *habitus* and by their specific capital volume and structure- and the characteristics of the committees -institutional agents in the field, which are of course not only the products of the aggregation of individual choices.

Our approach is a “multilevel” one, not in the sense of “multilevel techniques” but in a more general methodological and sociological sense. Our analysis goes from individuals to committees first defined as modality-mean-points of the sub-clouds of individuals. The strategies of the committees (interest rates, exchange rates) depend on the mean point of the sub-cloud, but also on specific characteristics of the committees and the banks at the institutional level, including what relates to their autonomy and institutional settings.

They are also in interaction with the broader political and economic context. The outputs of monetary policy (inflation rate, exchange rate, reserves of change, etc.) are the consequences of this complex interdependence processes. The committees operate in a global environment which is constituted by:

- The strategies of the other central bank committees ;
- Economic policies lead by governments (fiscal stimulus, etc.);
- The national and global macroeconomic and financial context ;

We observe a structural homology between the institutional, political and economic policies and the social properties of the central bankers. Studying the characteristics of 140 leading individuals may

help to understand global decisions of “central institutions” but also the both macroeconomic and macro-social dynamics of countries<sup>5</sup>.

During the years 2000, one may distinguish at least five periods in the US and Europe: the end of the Internet boom followed by the financial collapse in 2001, the very reactive monetary policy and the financial boom (bubble) under the impulsion the Federal Open Market Committee and its chairman Alan Greenspan, the financial meltdown after 2007, the sovereign debt crisis after 2009 (especially in Europe). During each of this period, stakes are of course very different and vary across countries.

In Japan, the general period is characterized by a loose monetary policy (zero interest rates policy) in relation to persistent deflationist trends, present since the end of the 1990s.

After the financial crisis (2007-2008), the western central banks seem to converge with the Japanese policy of zero interest-rate policy and non-conventional monetary and financial policies, but the ECB will maintain a 1% rate (REFI), and will start rising its rates more rapidly than the FRB, which is a recurrent trait: the ECB differs slightly from the FRB, but generally on the more restrictive side.

The Chinese policy appears rather specific, since it is first mainly related to a “political” strategy of international trade until the crisis, with an administrative and regulated management of exchange rates and a politically-led insertion into financial globalization. Its policy seems, nevertheless, to begin to converge with the western strategies during and after the crisis of 2007-2008, with a first loose then tightened monetary policy and a gradual appreciation of its currency (the Yuan).

A qualitative comparison of the monetary and financial strategies of the four banks seems to converge with more quantitative analyses. The difference between the Bank of Japan and other central banks of course relates first to a particular context, but the attempts to go out of the deflation through non-conventional measures have been facilitated by a strong pro-industry orientation of the committee, which we have observed in our data.

To conclude, analyses at the level of inter-individual variations inside committees may help reconnect economic macro-analysis to a more sociological understanding of individual’s actions, related to their insertion in a field, their biographical characteristics, which only make sense in relation to each-other.

---

<sup>5</sup> In this perspective, axes 1 and 2 can be seen as particular indicators of central bank independence (CBI): axis 1 relates to the “embeddedness” of central banking inside the academic world; axis 2 relates to the relative importance of “internal careers” inside the world of central banks.

## References

Arrighi Giovanni (2007). *Adam Smith in Beijing. Lineages of the 21<sup>st</sup> century*. London & New York: Verso.

Blinder Alan (2004). *The Quiet Revolution. Central Banking goes modern*, New Haven & London: Yale University Press.

Bourdieu Pierre, Boltanski Luc (1976). "La production de l'idéologie dominante". Actes de la recherche en sciences sociales, 2-3, p.3-73.

Bourdieu Pierre (1992). *Les règles de l'art. Genèse et structure du champ littéraire*, Paris : Seuil.

Lebaron F. (2009). "How Bourdieu `quantified' Bourdieu. The Geometric Modelling of Data". Chapter 2 in Karen Robson and Chris Sanders (eds), *Quantifying Theory: Pierre Bourdieu*. Springer Science + Business Media B.V. p. 11-29.

Le Roux, B. & Rouanet, H. (2004). *Geometric Data Analysis. From Correspondence Analysis to Structured Data Analysis*. Dordrecht: Kluwer.

Le Roux, B. & Rouanet, H. (2010). *Multiple Correspondence Analysis (QASS Series)*. Thousand Oaks,CA: Sage.

Pringle Robert (ed.) (2009), See *The Dexia Central Bank Directory 2009*, London: Central Bank Publications.

Stiglitz Joseph (2010), *Reforming the international monetary and financial systems in the wake of the global crisis*: <http://www.scribd.com/doc/42420801/The-Stiglitz-Report-2010>