

Post-Crisis Monetary Policy Strategies

(Panel discussion at the VIIIth Journée of the Foundation, 21-22 June 2010)

Louis BÊ DUC et Laurent CLERC¹
Direction des études monétaires et financières
Fondation Banque de France pour la Recherche

ABSTRACT

The aim of this paper is to present the main outcomes of the panel discussion that took place during the VIIIth “Journées de la Fondation” held in Paris on 21 and 22 June 2010. The panel, chaired by Jean-Pierre Landau, deputy governor of the Banque de France, dealt with the implications of the financial crisis on the design, conduct, implementation and the strategies of monetary policy.

The distinguished panelists included Carl Walsh (professor at the University of California Santa Cruz), Giancarlo Corsetti (professor at the University Institute in Florence), Pierre-Olivier Gourinchas (professor at the University of California, Berkeley) and Richard Portes (professor at the London Business School, president of CEPR).

The main issues raised during the panel are:

- The extent to which the current monetary policy framework, widely based on inflation targeting strategies, should be amended to factor in recent financial developments and prevent deflation ;
- The interplay between monetary, fiscal and financial policies implemented in times of financial crisis and the related issue of how and when to exit from these stimulating policies;
- The opportunity to design new monetary policy instruments in order to address national or regional imbalances in the context of a monetary union;
- The extent to which there is a scope to set up stand-by arrangements among central banks to ensure the provision of foreign currency in periods of stress;
- The interaction between monetary policy and exchanges rates at the zero lower bound.

JEL codes: E4, E5, E6, H6

¹ We thank Giancarlo Corsetti, Pierre-Olivier Gourinchas, Richard Portes and Carl Walsh for their suggestions and very useful comments.

The “Journées de la Fondation” provide the researchers who received a grant by the Foundation Banque de France² with an opportunity to present the result of their research to the public. The VIIIth Journées of the Foundation held in Paris on 21-22 June 2010 were devoted to the issue of “the macroeconomic policies in a crisis period”. The conference gathered more than 120 participants from academia, central banks, international institutions as well as economists from the private sector. Box 2 below provides a summary of the papers presented during the “Journées”.

The aim of this paper is to display the main outcomes of the panel discussion that took place on 21 June on “post-crisis monetary policy strategies”. The panel intended to draw some policy implications of the recent financial crisis both for the conduct and the strategy of monetary policy. The discussions focused on a set of issues related to: the opportunity to change the current monetary policy framework, widely based on inflation targeting, to better account for financial factors or developments and prevent deflation; the need to reconsider the interaction between monetary, fiscal and financial policies in the context of a financial crisis; the implications of zero lower bound policies for financial stability and exchanges rates developments; the need to extend the set or to design new monetary policy instruments to address financial imbalances, in particular in the context of a monetary union; the articulation between monetary and financial stability objectives.

The panelists included Jean-Pierre Landau, deputy-governor of the Banque de France and Chairman of the panel session, Carl Walsh, professor at the University of California Santa Cruz, Giancarlo Corsetti, professor at the University Institute in Florence, Pierre-Olivier Gourinchas, professor at the University of California, Berkeley and Richard Portes, professor at the London Business School, president of CEPR (Centre for Economic and Policy Research).

1. Should the current monetary policy framework be amended?

Carl Walsh, who introduced the panel, recalled that in the pre-crisis consensus on monetary policy, flexible inflation targeting was widely viewed as best practice for central banks. A consensus also existed that a target within the range of 1-3 percent represented an appropriate goal for inflation. This range is consistent with formal targets established by many inflation targeting central banks and with the implicit targets of many other major central banks such as the ECB and the Federal Reserve. Professor Walsh’s comments focused on two recent proposals to modify inflation targeting strategies: raising the average target for inflation; and, more radically, switching to price level targeting.

² See Box 1 for a presentation of the Fondation Banque de France and of its main activities.

On the first suggestion, Blanchard and co-authors³ have recently argued that a 4% average rate of inflation would constitute a safer target by providing more room for interest rate cuts when the economy faces an adverse shock. Likewise, John Williams⁴ estimates in a recent paper that "an inflation target of between 2 and 4 percent will, on average, be sufficient to avoid the Zero Lower Bound (ZLB) causing sizable costs in terms of macroeconomic stabilization even in a much more adverse macroeconomic climate." Another argument in favor of higher average inflation is that it increases the flexibility of real wages if nominal wages display downward rigidity as pointed out by Akerlof, Dickens and Perry (1996)⁵.

These benefits have yet to be balanced against the costs of a higher average inflation rate. First, Bailey (1956)⁶ and Friedman (1969)⁷ long ago noted that higher inflation causes private agents to economize inefficiently on their money holdings. Second, most tax systems are not fully indexed to inflation, leading to increasing distortions as average inflation rises. Third, relative price dispersion created by sluggish price adjustment generates welfare costs, even though these costs might be reduced if indexation were more common. At the same time, more widespread wage indexation might hinder the ability of the economy to adjust to shocks that require a movement in real wages. Fourth, there is some uncertainty as to whether inflation expectations would be more difficult to anchor if average inflation rates were to rise. Finally, the hard obtained stability of inflation expectations which has been a characteristic of the recent crisis would be put at risk if inflation targets are increased. A more effective strategy for avoiding the ZLB would be to reduce the risks of another major negative shock to aggregate demand. Better financial market regulation, as well as a more active policy response to emerging financial imbalances could lower the chances of returning to the ZLB.

A more radical response to the crisis would be to drop inflation targeting in favor of price-level targeting (PLT). The knowledge that prices will return to a target level influences expected inflation in ways that help to stabilize current inflation. Thus, price level targeting may have advantages over inflation targeting to the extent that it can lead expectations to act like an automatic stabilizer.

This role for expectations can be particularly important in a deflationary situation at the zero lower bound. As the actual price level falls, the gap widens between the actual price level and the path for prices implied by the target path. Thus, a credible commitment to PLT would cause expected inflation

³ Olivier Blanchard, Giovanni Dell'Ariccia, and Paolo Mauro (2010): "Rethinking Macroeconomic Policy", IMF position, note, February.

⁴ John C. William (2009): "Daedalus: Optimal Inflation and the Zero Lower Bound", Brooking Papers on economic Activity, draft (10, 11 September).

⁵ Akerlof, George A, William T. Dickens, and Georges L. Perry (2000), "Near-rational Wages and Price-Setting and the Long-run Phillips Curve", Brookings Papers on Economic Activity, vol. 31, pages 1-60.

⁶ Martin J. Bailey (1956), "The welfare cost of inflationary finance", *Journal of Political Economy* 64, 93-110.

⁷ Milton Friedman (1969), "The Optimum Quantity of Money", in: *The Optimum Quantity of Money and Other Essays* (Aldine, Chicago, IL).

to rise, helping to boost nominal interest rates above the ZLB. This role is strengthened if the target price path incorporates a trend inflation rate.

However, the effects on inflation expectations will depend on when PLT is adopted, which price index is targeted, and how quickly the public expects deviations from target to be eliminated. If U.S. had adopted price level targeting in January 2007 with a 2.0 percent drift, this would have led to tighter policy throughout 2007 and 2008, and would have generated expectations of deflation, exacerbating the ZLB problem. Which price index is chosen can also matter. While a target based on the PCE index would have generated a destabilizing movement of expectations, credible price level targeting based on the PCE less food and energy would have stabilized inflation expectations but they would have been little different than under a credible inflation targeting regime.

Carl Walsh highlighted three points that caution against adopting PLT. First, the stabilizing adjustment of expectations arises only if the public understands the implications of price-level targeting and believes the central bank is committed to this new policy. The experience with inflation targeting was that credibility followed experience, and the gain in anchoring expectations was not something that was achieved immediately. Gaining credibility for PLT in the midst of a liquidity trap may be particularly challenging if the time-varying price path is difficult to communicate to the public. Second, committing to a price level target while at the ZLB would lead to a rise in long-term nominal interest rates, which may easily lead some to question the central bank's commitment to economic expansion. Third, the impact on expectations depends on the speed with which the public expects the central bank to regain the target path. This may be hard to forecast since there would be no past experience to draw upon. If expectations are for an extended recession, the public may doubt whether the target path will be achieved very quickly. This would reduce the effect PLT would have in raising inflation expectations. Finally, commitment to a price path that involves future inflation is time inconsistent. Once the economy recovers from the ZLB, the optimal policy is not to create the inflation required to restore the price level to the promised target path. Finally, optimal commitment means doing what had previously been promised to do, even if it is not the optimal thing to do at the moment, which is another argument in favor of keeping the inflation targeting regime adopted by many central banks.

During the discussion with the audience, Michael Woodford (Columbia University) questions the fact that price-level targeting would be more time-inconsistent than inflation targeting. The commitment to an inflation target may on occasion be somehow mitigated to take account of the pace of expansion of the economy. A similar accommodation may apply in a framework of price-level targeting. Carl Walsh admitted that both systems may be somehow time-inconsistent but that it may be easier to commit to an inflation target (say 2 % for the year ahead, whatever past performance) than a return to a price level implying a wider range of target inflation rates. Jean-Pierre Landau asked Professor Walsh whether the liquidity provision by the central bank can be separated from monetary policy in a durable

way. Professor Walsh answered that an important variable is which sector should be eligible to central bank refinancing (and the crisis has underlined the need to extend refinancing to the non-banking sector), and, which kind of collateral should the central bank accept.

2. The interplay of monetary and fiscal policies in the aftermath of the financial crisis

Giancarlo Corsetti addressed two set of issues, one on fiscal consolidation and the other on the consequence of the crisis on the EMU “economic constitution”. He first stated that fiscal consolidation is just a phase of the policy responses to the crisis. In 2007-2008 the liquidity provision by central banks were seen as a way to alleviate the tensions within the financial sector, this was seconded in 2008 by budgetary intervention leading to a sizable rise in public debt (40 percentage point increase in government debt according to the IMF). While recognizing that there is not a good model of the crisis yet, Giancarlo Corsetti considered that timing and gradualism is of paramount importance as regards fiscal consolidation as shown in a recent joint paper⁸ in which he and co-authors conclude that a very drastic reversal of spending is not to be recommended and might lead to a strong deterioration of debt ratios through deflationary effect. He stressed, as highlighted in the paper he presented during the Foundation *Journées*⁹, that fiscal multipliers may reach very high levels in a period of financial distress.

On EMU, Giancarlo Corsetti considered that the initial “European constitution” is over as illustrated by many instances, such as the non compliance with the no-bail out rules, the failure of the principle of mutual surveillances or the extension of the scope of intervention of the ECB. This failure was to his mind a foreseeable outcome and the logical consequence of the lack of fiscal integration¹⁰. The euro is entering a new phase. As a preliminary remark, Giancarlo Corsetti discarded two opposite ways of moving ahead. Keeping the same framework, while committing to “seriously” implementing it in the future does not appear credible. Just scrapping the EMU fiscal framework and leaving discipline to the market is equally non credible because it would leave the way to bargaining bilateral deals and coalitions. The only reasonable way at the current time seems to be to pursue reforms aiming at setting up an institution to manage contagion; a debt restructuring mechanism; improving the regulation and supervision framework at the euro area level to contain macro risks. All these reforms are technically feasible but should require a political agreement. Prof. Corsetti addressed a list of general recommendations regarding the reform of the European economic constitution: it is first necessary to make the “no bail-out” clause credible, which will imply a mechanism to manage the spill-over effects. Second, the private sector should get access to transparent information about the state of the fiscal policy. In that respect, Giancarlo Corsetti pointed out that focusing primarily on debt and deficit

⁸ Giovanni Corsetti, Keith Kuester, André Meier, Gernot Müller (2010): “Debt consolidation and stabilization of deep recessions”, forthcoming, *American Economic Review, Paper and Proceedings*.

⁹ Giovanni Corsetti, André Meier, Gernot J. Müller (2009): “What determines government spending multipliers?”

¹⁰ William H. Buiter, Giovanni Corsetti, Nouriel Roubini (1992): “Excessive deficits: Sense and Nonsense in the Treaty of Maastricht”, CEPR discussion paper, December.

ceilings may even be distracting. Some kind of policy delegation might help (potentially via the European Commission), the form of which remains to be defined. Third, we need rules which could be conducive to Europe-wide political cohesion. In that respect, the system of fines against breaching the excessive deficit appears to him not credible and are bound to be applied discretionarily, they should therefore be abandoned. As a fourth recommendation, Professor Corsetti recommended that it should be ensured that changes in the fiscal framework do not hamper European market integration. In this respect, a final question, more empirical, relates to the degree to which the sovereign debt crisis in one country in the euro area spread to the bonds issued by the private sector in this country. At the current juncture, it has been noted that some corporations currently borrow at lower interest rates than the Greek government, contrary to the empirical evidence on sovereign crisis. To what extent can a single currency help insulating parts of the economy from a fiscal crisis? Overall, the crisis represents a good opportunity to implement the most needed fiscal reforms, which might differ across countries, in the following domains (more or less important across countries) : health, retirement pension schemes, tax evasion, productivity of the public sector. The danger is to take in a hurry fiscal measures for the sake of generating immediate cash surpluses which might not be coherent and durable over the medium term.

3. The opportunity to design new monetary policy instruments in order to address national or regional imbalances in the context of a monetary union

Pierre-Olivier Gourinchas expressed his views on the ECB monetary policy during the crisis, drawing inter alia on a forthcoming joint study on the liquidity management of the ECB during the crisis¹¹. He discussed two main topics: the provision of liquidity in foreign currency; how to implement monetary policy in a monetary union which is not an optimal currency area.

On the first aspect, the provision of foreign currency in the context of the liquidity crisis reflected an unprecedented level of cooperation among central banks. This took the form mainly of reciprocal credit lines between major central banks (the US Fed, the ECB, the Swiss National Bank, Bank of Japan, Bank of England) starting in December 2007. In substance, the amount of USD denominated claims held by European financial institutions grew very rapidly from 2000 to 2007. These claims were financed short term on the US wholesale funding markets. With the crisis, the inter-bank market froze and most of these European institutions lost access to the US wholesale funding market and initially resorted to short-term foreign exchange swaps. The forex swap market started showing elevated levels of stress that translated into significant deviations from covered interest rates parity. Eventually, these institutions resorted to the ECB to get USD funding. This was made possible mainly

¹¹ Charles Goodhart, Pierre-Olivier Gourinchas, Markus Brunnermeier and Raffael Repullo (2010), Monitoring the ECB n° 7, "Managing the Liquidity and Credit Crunch", CEPR, forthcoming.

through the establishment of reciprocal swap lines between the Federal Reserve and the ECB¹². These swap agreements were initially limited to 20 billion dollars in December 2007, then increased to 50 billion dollars in September 2008, before becoming unlimited after the collapse of Lehman brothers. The size of the outstanding dollar swaps to the ECB rapidly increased and reached a peak of 290 billion USD by early 2009. This amount of dollar liquidity should be compared to a European dollar funding gap estimated at about 0.4 to 2.1 trillion USD at the end of 2008 in a study by the BIS¹³. These credit lines were structured as a back-stop financing: they were quite expensive so that banks only came to it as a last resort and the outstanding swaps quickly declined when interbank market tensions receded. This calls for a couple of remarks: first, it is clear that in normal circumstances, no central bank is going to agree to establish standing unlimited swap lines with other monetary authorities. This would give other central banks the ability to create high-powered money, and to provide liquidity to financial institutions which are not under its direct supervision. Even limited swap facilities may not survive in the medium-term. Fed Chairman Ben Bernanke explicitly stated recently that the Fed swap lines would not be maintained for ever. Instead, he argued that it was incumbent upon each country to identify and manage foreign currency liquidity shortages in a pre-emptive fashion. As a result, there is a clear need for a real time measurement of the potential funding imbalances. From that point of view, the European dollar funding shortage was not properly identified by the European monetary authorities before the crisis, nor was its size properly measured. Even the above mentioned study by the BIS provides only a very indirect and imprecise estimate of the dollar shortage. Second, if the quick establishment of liquidity facilities is not guaranteed in times of financial stress, monetary authorities need to think of alternative forms of insurance. The first one, “self insurance” through official reserve accumulation would be an expensive proposition for the European Central Bank. To see this, compare the size of the outstanding swap lines at their peak of 290 billion USD, with the total amount of reserves (ex-Gold) available in the European system of central banks (200 billion USD).¹⁴ To be able to fend meet the demand for dollar liquidity would require a major expansion of the official reserves of the ESCB. It is unrealistic to expect that the ECB would embark on such a large scale program. The second possibility would be the involvement of the IMF through flexible or contingent credit lines, but this prospect also looks somewhat remote since it would require a much more substantial reform than the establishment of flexible credit lines. Therefore, the most practicable solution at the current juncture seems to be some form of stand-by agreement among a network of central banks (as existed in the 1960s for some countries facing balance of payments difficulties).

On the second topic, which is the conduct of monetary policy in a monetary area which is not an optimal currency area, Pierre-Olivier Gourinchas first agreed, with other observers, that the European sovereign debt crisis is not simply a fiscal issue and also relates to competitiveness. The euro area is

¹² These arrangements also involved the Swiss National Bank, the Bank of England and the Bank of Canada.

¹³ Ingo Fender and Patrich McGuire (2010): “European banks’ US dollar funding pressures”, BIS quarterly review, June. These amounts include the total funding gaps, at the end of 2009, of banks which had an excess of claims in dollar against liabilities in dollar at the start of the credit, and which are located in Germany, the Netherlands, Switzerland and the United Kingdom.

¹⁴ Based on data reported by the ECB as of April 2010. This figure corresponds to the 149 billion EUR in convertible currencies in the Eurosystem

not an optimal monetary area, it was not at the time of the Delors¹⁵ report and is still not, which means that ways have to be found to avoid divergence of competitiveness across member countries. Short of realignment of currencies, impossible inside the euro zone, restoring competitiveness requires relative price adjustment that can be impeded by the low overall inflation rate in the euro zone. The resulting quantity adjustment can be painful and even politically unsustainable. To cope with that difficulty, he suggested that the ECB expands the set of instruments that it uses in order to affect differentially credit and monetary conditions in different regions of the euro area. For instance using differentiated collateral rules for assets from different countries could help adjusting the cost of capital across regions. Jean-Pierre Landau wondered whether the collateral framework was the most appropriate instrument for that purpose and whether enough is known on the transmission mechanism for these new instruments. As another kind of instrument, Pierre-Olivier Gourinchas suggested that the ECB could cope with excess inflationary pressures in one country (perhaps fuelled by capital inflows or asset price bubbles) by increasing haircuts on assets repurchased by the ECB from that country. This would have the effect of increasing the cost of credit and consequently of moderating credit expansion in that country, cooling off the economy and allowing relative price dynamics to remain stable. He admitted that the transmission mechanism for all these new (not limitative) sets of possible instruments have to be assessed more accurately through further research. In the discussion, Richard Portes indicated that an indicator of loan to value ratio could also be a useful indicator to differentiate central bank refinancing policy. Overall, Pierre-Olivier Gourinchas concluded that extending the scope of instruments by the central bank is a way to deal with the “trilemma” according to which one cannot combine fixed exchange rates, capital mobility and independent monetary policy, by somehow mitigating capital market integration through some country segmentation of the market.

4. Monetary policy and exchange rates developments at the zero lower bound

Finally, Richard Portes focused on the link between exchange rates and monetary policy in the current context of the zero lower bound. Observing first that there is little literature on that issue, he referred to the work by Lars Svensson¹⁶. A country faced with a liquidity trap may commit explicitly to a higher future price-level and implement concrete actions to demonstrate this commitment, for instance through quantitative easing and interventions to reduce the exchange rate, a reduction of exchange rate which in turn will be an excellent indicator of expectation of higher inflation rates. However, such a policy may not work if the big economies in the world are all in or near a liquidity trap. Referring to the Mundell-Flemming model, a fiscal contraction would normally reduce interest rates at home, have a contraction effect at home and lead to exchange rate depreciation, then exporting contraction abroad.

¹⁵ European Commission (1991): “One Money, One Market, an evaluation of the cost and benefits of economic and monetary union”.

¹⁶ Lars R.O. Svensson (2003), “Escaping from a Liquidity Trap and Deflation: The Foolproof Way and Others”, *Journal of Economic Perspective*, 17 (4), Fall.

However, for an economy at or near the zero lower bound, interest rates and thus the exchange rate should not be affected. Yet, there should still be an effect of a fiscal contraction policy on the risk premium, so that all will depend on the effect of this fiscal contraction on agents' expectations. If confidence is not increased, there would be a "double hit" for the rest of the world due to a fall of demand in the country experiencing fiscal consolidation and a depreciation of its currency (resulting from the rise in exchange rate risk premium), which might be perceived as a competitive devaluation. As a first qualification, even at zero interest rate policy, fiscal policy might affect the ratio of traded versus non-traded good prices. If a fiscal contraction lowers the relative price of non-traded goods, this will amount to a real exchange rate depreciation which should be expansionary at home. As a second qualification, even in a situation of zero interest rates worldwide, the differences in quantitative easing across countries may trigger different inflation expectations across countries impacting on exchange rates. Finally, unsterilized quantitative easing in one country may trigger similar countering reactions in the rest of the world. Overall, Richard Portes concluded that the world is going towards premature fiscal contraction, which is to entail important exchange rate movements. Reacting to this presentation, Jean-Pierre Landau made a first observation that not every country is at zero lower bound and that there are huge differences in inflationary conditions. He asked to Richard Portes if there is something like a global monetary condition one should account for. The very permissive monetary conditions to respond to the crisis have so far not impacted on inflation, but will that be true for ever? Richard Portes argued that there have always been attempts to characterize the global monetary stance (for instance the ratio of M3 to GDP indeed started to take off in the early 2000s relative to trend), but that, according to him, it would be wrong to subordinate domestic monetary policy to a fuzzy evaluation of global monetary conditions.

BOX 1

"Fondation Banque de France pour la recherche en économie monétaire, bancaire et financière": since 15 years actively promoting economic research

The Foundation Banque de France is a public Foundation which aims at fostering economic research in the field of Money, Banking and Finance and at promoting synergies between the Banque de France and the academic community. The Foundation received public recognition in 1995.

Information can be found at the following link:

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- Awarding grants for research projects through an international call for proposals. Around four grants of 30 000 euros each are awarded annually. Since its creation, the Foundation has awarded 61 grants, benefiting to 150 high-level researchers and 76 research centres worldwide.
- Organising the Foundation's *Journées*: held under the auspices of the Governor, the *Journées* bring together the best projects coming to fruition from the last calls for proposals.

- Organising a visiting scholar programme whereby researchers may run their own research for some weeks/months at the Banque de France, while interacting with economists/researchers in the Banque (2 calls for proposals per year in December and June – around 15 researchers invited each year).
- Providing resources to research institutions or for different events such as workshop or conference.
- Encouraging young researchers through its PhD prize and its special prize for young researchers.
- Encouraging interchanges between the scientific, private and institutional communities, by inviting researchers to present a seminar at the Banque de France (around 20 seminars organised per year).

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**also member of the evaluation committee for research grants*

BOX 2

The Foundation's 8th Journées, "Macroeconomic policies in a crisis period", 21-22 June 2010 in Paris

The Banque de France Foundation's 8th *Journées* took place on 21 and 22 June at the Palais Brongniart in Paris. They were devoted to the topic of "Macroeconomic policies in a crisis period." The programme for the *Journées* as well as the papers presented are available on the Foundation's website at the following link:

<http://www.banque-france.fr/fondation/gb/journees/historique/2010/programme-VIIIth-journees-of-the-Foundation-Banque-de-France.htm>

The *Journées* make it possible to present publicly the research projects that have received the Foundation's financial support following its highly selective procedure of calls for proposals.

Christian Noyer, the Governor of the Banque de France and the Foundation's President, introduced the Journées by analysing the Eurosystem's recent interventions on the bond market in the context of the sovereign debt crisis in order to ensure the smooth functioning of transmission mechanisms. The speech can be found at the following link: <http://www.banque-france.fr/gb/instit/telechar/discours/2010/keynote-speech.pdf>

The first session of the conference was devoted to liquidity management in a crisis period and to the roles played by central banks. In a joint contribution with Denis Gromb (INSEAD), Dimitri Vayanos (London School of Economics) highlighted the role of the financial constraints faced by arbitrageurs on financial markets and their impact on investment strategies and asset prices. For her part, Gara Afonso (Federal Bank of New York) presented an analysis of liquidity risks and their systemic implications based on financial flows circulating in real time gross settlement systems.

The second session was devoted to monetary policy. The paper by Pierre Gosselin (Université de Grenoble), Aileen Gosselin-Lotz and Charles Wyplosz (Geneva Graduate Institute) analyses the level of transparency that central banks should adopt in the publication of interest rate forecasts in a context of information asymmetries. It shows in particular that transparency is optimal except in certain scenarios where, on the contrary, it distorts communication to the private sector. Carl Walsh (University of California, Santa Cruz) presented a model of frictions in the labour market and assessed their implications for optimal monetary policy.

The third session addressed economic policies in the global economy. Giancarlo Corsetti (European Institute, Florence) set out the results of an empirical analysis of fiscal multipliers, which measure the impact of increases in public spending on economic activity. He highlighted that, while this impact is positive but small in normal periods, it can reach very high values during periods of financial crisis. Isabelle Méjean (IMF and École polytechnique) shed new light on the measurement of elasticities of substitution between domestic and foreign goods. In practice, she shows that the value of these elasticities is roughly twice as high when calculated using sectoral rather than aggregated data. Ester Faia (University of Frankfurt) investigated the effects of globalisation. She concluded that the sensitivity of domestic inflation to external factors has increased over the past decade. Finally, based on a historical analysis of the sterling crisis in the 1930s, Marc Flandreau (IHEID, Geneva) deemed economically viable the durable coexistence of several international currencies. He thus counted the thesis that there is only room for one international currency because it is used by a larger number of economic agents ("network externalities").