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Should the ECB Have a Dual Mandate? Probably Yes

The nature of the mandate of the central banks summarizes the social contract between the citizens and the institution, which has monopole of money creation. In the mandate, social preferences are summarized in broad terms. The mandate provides guidelines to central bankers to restrict the set of legitimate goals. What appears as a restriction of the freedom of central bankers is the wisdom of the past. To be efficient in the long run, central banks should focus on a limited set of goals, which can be reached with a limited number of instruments.

There remain important differences between mandates of central banks around the world. The ECB has only a monetary mandate: Reaching the objective of price stability over the medium-run, which is understood as inflation below but close to 2%. In contrast, the Fed has some real objectives in its mandate: maximum employment in addition to stable prices and moderate long-run interest rates.

Are those differences in mandate the results of differences in social preferences or diverging views about what central banks can achieve over the medium-run ? This question is all the more complicated in Europe as one can suspect that social preferences about the tradeoffs between inflation and the stabilization of economic activity may differ across EU Member States. Instead of speculating about these social preferences, which are so difficult to measure, one can observe the action of central banks during the crisis to infer the true objectives of central banks.

The actual practice of central banks during the crisis and recent advances in economic research suggest that price stability as a unique mandate may be too limiting. In this chapter, it will be argued that central banks should have a real objective such as maximum economic activity in addition to a monetary objective, which is stable inflation. This second real objective would be better than a financial stability objective or an objective to prevent financial crisis. Indeed, it is not clear that one should try to stabilize financial fluctuations, when they have no adverse effect on economic activity. This may hamper the functioning of financial markets. Moreover, a condition to stabilize economic activity is to avoid financial crises which have adverse effects on economic activity. A real objective is sufficient for a central bank to try to identify financial imbalances, which could lead to financial disruptions and negative effects on output and unemployment.

The first section of the chapter develops the argument by first analysing some of the tools elaborated by central banks in the crisis to stabilize financial markets and economic activity. It will then be argued that an evolution of the mandate of the ECB would first allow recent (and desirable) decisions to be consistent with the mandate, and second that it would give more freedom to implement new tools, which may be necessary in Europe. The second sec-

tion justifies this change in the mandate by answering to four main criticisms of an introduction of a real objective in the central bank mandate, using recent economic research.

1 When Central Banks Stabilize the Economy

Central banks have taken decisive actions to stabilize economic activity at various stages of the recent economic crisis. These actions are described at length in various reports (IMF, 2013; Gros, 2012, among others). What is

more interesting than the detailed nature of these actions are the market failures that central banks had to cope with. At least four types of policies were implemented.

The first type of intervention is the provision of some funding to specific non-financial actors who were credit constraint. The Fed has implemented a policy to massively buy commercial papers during the most dramatic moments of the financial crisis. The Commercial Paper Funding Facilities (CPFF) allowed the Fed to buy for USD 350 billions of commercial papers at the beginning of 2009. Indeed, the run on the shadow banking system generated a huge decrease in the investment of money market funds (MMFs) in commercial paper, which reduced dramatically the ability of firms to borrow short term. The Fed has to substitute for MMFs to avoid bankruptcies of non-financial firms. The ECB has introduced the same policy at a smaller case with the Covered Bond Program, which allowed the ECB to buy covered bonds to ease the financing of some firms.

The goal of these two policies was not to stabilize financial markets, but to limit the effect of the financial crisis on real economic activity. In other words, these policies were mostly aiming at improving capital market allocation during the financial turmoil. It is very possible that more could be needed in this direction in the euro area. Small firms (SMEs) have been facing very hard financing conditions in southern European countries in 2013 due to the bad qualities of some assets on some banks' balance sheets. A more direct financing channel toward SMEs might avoid inefficient bankruptcies. It is thus possible that the ECB could improve capital allocation due to the poor state of the banking sector.

The second type of policy intervention is the provision of liquidity to financial institutions. In Europe, this has been done by the spectacular Very Long Term Refinancing Operations (VLTRO) which allowed financial institutions to borrow up to three years at a fixed interest rate with full allotment. These operations are standard operations of lender of last resort, which allowed solvent but liquid financial institutions to borrow from the central banks (but here at no cost or even with a subsidy in case of the VLTRO, due to the low interest rates). Those operations were basically aimed at avoiding inefficient bankruptcies which could translate into a severe credit crunch. In Europe, these actions were thus related to the traditional role of banking stability, which has been a

traditional function of central banks since the creation of the Fed in 1913.

The third type of policies concerns the policy toward public debt and the financing of States. With quantitative easing, the Fed has bought a huge share of public debt. With Outright Monetary Transactions (OMT), the ECB has announced that it may, under certain conditions, buy public debt to stabilize financial markets. Key to the success of the OMT was the commitment to buy any necessary amount. As is widely acknowledged, the action of the ECB has contributed to stabilize the European financial markets and has avoided contagion effects of the Greek situation.

The fourth type of action is a more standard monetary policy action to affect the business cycle, which is the management of the short-run interest rate. The management of the business cycle by monetary authorities is part of the Keynesian legitimacy after the Second World War. The amount of price and nominal wage stickiness that is observed in Europe proves that the central bank can indeed have a substantial role in stabilizing short-run economic activity. In this respect, both the Fed and the ECB have now introduced forward guidance to coordinate expectations of economic agents to low interest rate, as long as necessary, if medium-run inflation expectations remain anchored.

From this brief overview, the ECB and the Fed have contributed to reduce the effect of financial crisis on economic activity and to stabilize financial markets, although the quantitative impact of these policies is still under debate, (see IMF (2013) for references).

Economic justification

There are strong economic justifications for central banks policies aiming at stabilizing economic activities. Most of these economic justifications rely on the possibility of multiple equilibria and the ability of central banks to avoid a bad equilibrium, where economic activity is low. The seminal paper of Diamond and Dybvig (1983) formalized the possibility of an inefficient run on the banking sector, which could be avoided by an adequate policy of the central bank. This model has generated a huge literature to analyse the conditions of optimal public intervention. The run on the shadow banking system in the USA has resurrected these models as a convincing explanation of financial instability after the subprime crisis. Literature on information asymmetry has since many years provided framework to think about inefficient credit rationing for non-financial firms (Holmstrom and Tirole, 1997).

The possibility of multiple equilibria in the financing of public debt is also well known since the work of Cole and Kehoe (1996). For sufficiently high level of public debt, financial market may generate self-fulfilling financial crisis: The fear that a country may face financing difficulties in the future may drive capital outflows, which indeed creates financial difficulties today. This mechanism could explain the problem of the Greek public debt. Observers now acknowledge that Greece has a solvency problem as it is not able to pay back its full stock of debt whatever the "equilibrium" is. Nevertheless, self-fulfilling default risk has probably destabilized the Italian sovereign bond market before the OMT announcement.

Importantly, the role of the central bank intervention in the aforementioned models is known to rely on the failure of other policy interventions to stabilize more directly economic activity. When fiscal policy and financial regulation are not optimally designed, a benevolent central bank can stabilize economic activity. In the case of self-

fulfilling public debt crisis, Uhlig (2011) shows that the existence of multiple equilibria derives from the fact that the State issues too much debt due to its own preferences. As a consequence, the public debt becomes high enough to enter a region of multiple equilibria. It is thus a general conclusion that central banks can stabilize economic activity (independently of its effect on inflation) because of the existence of constraints on other policy tools. Only if we accept the idea that other policies (financial regulation and fiscal policy among others) are not sufficient in stabilizing economic activity, central banks have a role to play in this respect.

All these new tools and policies have been implemented by the ECB in its current mandate, which is to focus on price stability by referring to the necessity to restore the transmission channel of monetary policy. It is claimed that it is a necessary condition to be able to insure price stability, which is its only final goal. Jürgen Stark in a recent public intervention (Keynote intervention at the MIPIM in 2013) contests this interpretation and argues that the OMT program was in fact "Out of the Mandate Transactions" because price stability was not at stake: The problem was the financing of some European states which is a fiscal problem.

It is not the goal of this chapter to discuss this claim. It will be argued that introducing a quantitative objective within the mandate of the ECB, such as the stabilisation of economic activity at the highest level consistent with price stability would have avoided non relevant discussions about the interpretation of the current mandate of the ECB. Second, it may allow the ECB to take more actions to stabilize economic activity in Europe, without referring to price stability. In short, the ECB can and should stabilize economic activity. Such an evolution would move the mandate of the ECB closer to the one of the Fed, introducing a dual mandate.

The case for this strong claim will be indirect. Indeed, the next section will justify the need for a change in the mandate by answering to four main criticisms of such a dual mandate.

2 Objections to a Change in the Mandate

Keep central banks focused on one objective: Financial regulation and fiscal policies will now be enough to stabilize economic activity

Let's first develop this criticism. First, as written above, in all theories where the central banks can and should stabilize economic activity, this result relies on some restrictions put on other policies, which are not optimally designed (Farhi and Tirole, 2012; Challe et al., 2013; Shleifer and Vishny 2010, among others). As a consequence, improvement in financial supervision in Europe, both at the macroeconomic and the microeconomic levels, such as the implementation of the new regulatory framework for the banking system, will imply that there is no more role for central banks to stabilize economic activity. A more elaborate version of the argument relies on the Tinbergen principle. There should be one tool for each objective and eventually one institution responsible for this tool: Financial regulators for financial stability, fiscal stabilizers for economic activity and central banks for price stability. Introducing an institution in charge of a dual mandate might create some confusion in the responsibilities of each institution and might thus blur the incentives of some of them.

The answer to this criticism is twofold. First, although different institutions should be in charge of monitoring various aspects of economic activity,

there will inevitably emerge a hierarchy among them. Indeed, the power of central banks, which have a monopole of money creation, will always be much stronger than the power of any other institution. For this obvious reason, the central bank will always remain the residual lender of last resort in front of unforeseen contingencies in times of crises. These unforeseen contingencies will always exist, although we learnt from the crisis. It might be very dangerous to think that financial regulation is perfect and would prevent all future forms of financial instabilities. This conception contradicts the very notion of financial innovation and entrepreneurship in the financial sector. On the contrary, a lesson of the crisis might be the opposite: Imperfect financial regulation and constrained fiscal policy may be the rule. Finally, evolution, of the financial regulation in the USA leaves a key role for the Fed and is consistent with its dual mandate.

Second, recent research indicates that previous results claiming that central banks should only focus on price stability only rely on a naïve view of the functioning of financial markets. First, a popular view in monetary economics assumes a dichotomy between financial economics and monetary economics: Money and credit are different and independent objects. Following the seminal contributions of Patinkin (1956) and Clower (1967) and more recent theoretical contributions in the monetary search literature (such as the search-theoretic view on money, such as Kiyotaki and Wright (1989)), money is introduced in macroeconomic models as friction in the goods market. Due to this constraint, money is used mostly for transaction motives (cash-in-advance constraint, or standard money-in-the-utility function). This formalization allowed DSGE models to consider monetary policy in models with perfectly functioning financial markets. Starting from this environment, New Keynesian theories showed that the quantity of money was not really relevant in these framework and that one could consider cashless economics (models without money) to study monetary policy.

The result of this evolution of monetary economics is that monetary policy was mainly analyzed in models with perfect financial markets, without any money, and with some frictions on the goods market to generate a role for monetary policy. It should not come as a surprise that the normative conclusions of these models are that central banks should look for price stability. This framework has now generated a huge literature introducing financial frictions in this framework to study the nature of optimal monetary policy. This literature will generate interesting

results but the role of money may not be adequately specified.

Recent contributions in monetary economics show that the data do not support a dichotomy between monetary and financial economics, and that it is hard to think about money without considering financial frictions which affect both asset price and money demand dynamics. In other words, the monetarist dichotomy between monetary

and financial economics may hide the key role of financial frictions in the conduct of monetary policy.

This claim is based on an analysis of money demand at the household's level to discriminate between different theories of money demand, which is done in Ragot (2013). If money is mainly used in the economy for transaction motives (and hence because of a friction on the goods market) money demand should be related to consumption expenditures at the households level. More precisely, money demand should be proportional to consumption expenditure, the relationship between the two depending on transaction technologies (credit card development for instance). In other words, the shape of the money distribution across households and the shape of the consumption expenditures across households should be close. A direct consequence is that standard inequality measures (such as the Gini coefficient) should be the same for both the distribution of money and the distribution of consumption expenditures. For the USA, the Gini coefficient for consumption expenditure is close to 0.3 but the Gini coefficient for money is close to 0.8. Money is much more unequally distributed than consumption expenditures. Moreover, the Gini coefficient for the distribution of assets is close to 0.8 as well. As a consequence, money is similar to other financial assets and very different from a transaction tool. This property also holds for Italian data for which data are available.

This empirical distribution of money can be reproduced in a model with two financial frictions. The first one is a financial structure where agents face incomplete insurance markets and some credit constraints, and where they face fixed participation costs to financial markets. To avoid those costs, households hold money to self-insure against income risks. This theory of money demand is related to two lines of research in money theory. The first one is the Bewley theory of money demand, which stipulates that money is an asset used to self-insure against income shocks in an economy where financial markets are very incomplete. The second one is the work of Baumol and Tobin, who introduced fixed participation cost in monetary analysis. Both frictions, incomplete financial markets and fixed participation cost are necessary to reproduce the empirical distribution of money (Ragot, 2013 for the definition of money used and the various robustness checks).

As a consequence, the analysis of evolutions of money demand and of the effects of changes in money supply must rely on an analysis of financial markets imperfections. In other words, one cannot separate monetary analysis from financial markets studies. Economic research after the financial crisis will probably generate a more integrated framework where financial markets and monetary analysis are more deeply integrated. It is too early to speculate about what would be the optimal monetary policy (which maximizes welfare) in these new environments. Nevertheless, it may now be difficult to take for granted that central banks should unambiguously only target price stability

without considering changes in economic activity.

Central banks should not generate some redistribution of wealth across economic agents

Central banks have no political mandate to justify redistributive policy across agents. This is the goal of fiscal policy after a democratic debate.

This objection considers that a unique goal such as inflation targeting does not generate redistribution across agents. This does not seem to be the case. Any monetary policy change, either conventional or non-conventional generates some redistribution across agents. There exists a literature on heterogeneous agents in monetary environments. In these models, agents hold different nominal position and the models try to generate a realistic amount of wealth inequality. A first class of models the redistributive effect of changes in long-run inflation (Erosa and Ventura, 2002; Akyol, 2004; Algan and Ragot, 2010). More recent papers study the short-run redistributive effects of inflation shocks (Doepke and Schneider, 2006; Meh, Rios Rull and Takajima, 2010). Finally, the current research tries to identify the short-run redistributive effects of monetary policy, considering the inflation dynamics as endogenous (Gornemann, Kuester and Nakajima, 2012; Algan, Allais, Challe and Ragot, 2013). All these models show that changes in inflation, in the money supply or in the short-run interest rate generate a substantial amount of redistribution across agents.

This does not imply that we should accept not mitigating the redistribution risk. Monetary policy should try to minimize the short-run redistribution risk and fiscal policy should correct for long-run redistributive effects. Nevertheless, the redistribution risks generated by central banks intervention should be included as part of a tradeoff in front of other objectives such as the stabilization of economic activity (or even price stability). At this stage the literature with heterogeneous agents and a realistic monetary environment does not allow to derive clear normative results. Some promising current research will probably provide results in a close future (Gornemann, Kuester and Nakajima, 2012; Challe, Matheron, Ragot and Rubio-Ramirez, 2013; Ravn and Sterck, 2013).

Central banks should not provide too much insurance to economic actors, who would take too much risk

This moral hazard argument has been elaborated for the relationship between central banks and private agents, and is sometimes invoked for the relationship between central banks and politicians in charge of fiscal policies. This objection is obviously valid and has been studied in various papers (Farhi and Tirole, 2010 among others for references). For this reason, it may not be a good idea to introduce financial stability as an objective for central banks. Central banks should be concerned only by financial instability, which has adverse effects on real activity and on some actors who were not involved in financial risk taking. Systematic intervention to reduce financial instability may indeed provide wrong incentives and, more generally, reduce the informational content of financial prices.

The moral hazard issue concerning the State is more difficult to discuss. For instance, considering the European situation, it is difficult to assess how much of the fiscal problems faced by some southern countries (and hence the financial instability generated) is the results of the anticipation of central bank intervention. More generally, it may be difficult to deduce from the European

situation if state governance is really affected by central bank intervention. Some academic papers, such as Uhlig (2011), assume a suboptimal public policy, independent of monetary policy (which generates high public debt) to deduce the optimal intervention with other tools.

Finally, the moral hazard problem in the USA seems at least equally the result of poor financial regulation than the result of the anticipation of a bailout policy by the central banks. Hence, although moral hazard consideration may be crucial to design the tool to reach the objective of a dual mandate, it is difficult to argue that it should prevent any dual mandate for central banks.

The dual mandate is too broad and not operational

An easy answer to such a criticism would be to claim that the result of the Fed in terms of stabilizing inflation and economic activity does not seem inferior to the result of the ECB. This easy answer would miss several important points concerning the implementation of monetary policy objectives.

First, a too broad mandate for central banks may generate some lobbying activities or some political interference to affect, for instance, unemployment in the short-run. This objection concerns more central bank independence than the nature of the mandate. A broad mandate can be attributed to a central bank in charge of independently assessing the relevant tradeoffs.

Second, a dual mandate is not quantitative enough to evaluate the performance of central bankers. One must observe that a quantitative objective for inflation targeting is a recent innovation. In addition, one can consider that central banks could quantify some objective (inflation over the medium run) and justify deviations for other objectives. For instance, the Fed has recently defined quantitatively an objective for the unemployment rate.

Third, trying to reach many objectives with one tool is not a good idea. First, central bank intervention in the recent crisis has first shown that monetary policy can actually be implemented by various instruments. Second, unfortunately, tradeoffs are the rules and some institutions may be in charge of internalizing these tradeoffs.

Finally, central banks are not competent to assess both financial and economic activity in addition to monetary developments. After a change in the mandate, a learning curve is likely to be experienced, and some additional human resources may be necessary, but it is difficult to think that this would be a problem.

Conclusion

Although economic analysis plays a role in changes in the doctrine and mandate of central banks, these changes may first come from the outcomes of alternative central bank practice. In this regard, the difference in central bank policies in Europe, in the USA, in UK an in Japan will create enough variety to guarantee a lively debate. Anticipating the discussions, this chapter has argued that there are good reasons to include a real objective in the mandate of the ECB, to bring it closer to the mandate of the Fed.

The main difficulty of such a change is the uncertainty about the additional redistribution it would create among European countries. This subject is very sensitive in Europe, as the discussions about Target2 have shown. As a consequence, it seems more realistic to think that a change in the mandate can be possible when the European sovereign debt problem has been definitely solved. This political economy problem has been deliberately ignored, but some additional quantitative research in this direction would be very useful.

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