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Development central banking: A review of issues and experiences

Gerald Epstein

Employment and Labour Market Policies Branch



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Preface

The primary goal of the ILO is to work with member States towards achieving full and productive employment and decent work for all. This goal is elaborated in the ILO Declaration 2008 on *Social Justice for a Fair Globalization*, which has been widely adopted by the international community. Comprehensive and integrated perspectives to achieve this goal are embedded in the Employment Policy Convention of 1964 (No. 122), the *Global Employment Agenda* (2003) and – in response to the 2008 global economic crisis – the *Global Jobs Pact* (2009) and the conclusions of the *Recurrent Discussion Reports on Employment* (2010 and 2014).

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Azita Berar Awad Director Employment Policy Department

iii

¹ See http://www.ilo.org/public/english/bureau/dgo/download/dg announce en.pdf

² See http://www.ilo.org/employment.

Foreword

The paper argues that central banks should play a broader role in helping developing countries meet their key challenges, such as generating productive employment, helping to allocate investment to productivity enhancing activities and helping to tackle the challenges of climate change. A great deal of work needs to be done to better understand the optimal institutional and governance structures for central banks in different settings, the types of goals and instruments most appropriate for different challenges, and the best kinds of monitoring frameworks to empower central banks to carry out its core stabilization function while implementing its development goals. Finally, it needs to be better understood how the central bank can work effectively with other key institutions, such as development banks, specialized financial institutions and a variety of government ministries and private actors while, at the same time, ensuring that it is not overwhelmed with tasks better undertaken elsewhere. To answer these questions, more case studies are required. General lessons are certainly helpful, but appropriate solutions are to be found in specific national settings.

Iyanatul Islam Chief Employment and Labour Market Policies Branch Employment Policy Department

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Contents

Prefa	ce	iii
Forev	word	v
Ackn	owledgement	vi
1	Introduction	1
2.	Lessons from the financial crisis of 2007-2008	2
3.	What's wrong with inflation targeting?	4
4.	Development central banking: Historical precedents.	6
5.	Development central banking: Targets and instruments and current experience	8
6.	Questions about development central banking.	10
7.	Conclusion	12
Refer	rences	13

1 Introduction

In both the developed and developing world, countries face significant transformational challenges. According to the International Labour Organization (ILO), global unemployment is over 200 million, with vulnerable employment being almost 50% of the total; among youth the unemployment rate stands at 13.1% but, in some places, such as the southern European countries, it is significantly higher. If current trends continue, these levels of unemployment and unemployment rates are unlikely to decline appreciably (ILO, 2014). In fact, in some respects, current trends are virtually guaranteed to get worse. Specifically, climate change, which is already creating considerable economic dislocations in many parts of the world, is predicted to accelerate over the next decades. It will especially harm poor and economically vulnerable communities (IPCC, 2014).

Successfully confronting these challenges will require considerable structural transformations in many countries in a relatively short period of time. With respect to economic development, reducing unemployment and alleviating poverty, it is increasingly recognized that successful developers have undergone major structural transformations focused on employment generation, sectoral diversification, and investment in human capacities, public infrastructure and technological upgrading in order to achieve an equitable rise in living standards (Ocampo et al., 2009). Moreover, to confront the looming perils of climate change, it is well understood that significant investment in renewable energy and structural transformations in building, transportation and manufacturing will be required to reduce dependence on fossil fuels sufficiently without doing extreme harm to the economy and people's livelihoods (Pollin et al., 2014).

Purely market based solutions are ill suited to such structural challenges, which require long-term planning and investment in processes involving significant coordination problems and extensive externalities. Markets, and especially modern financial and investment markets, tend to be short-term oriented, prone to boom and bust, and poorly suited to promote long-term investment of the type required for long-term structural transformation. Successful attempts at dealing with these kinds of structural changes historically have thus required strong government guidance of the associated market processes. In modern times, much of this guidance has included institutional mechanisms to foster long-term orientation and planning with respect to financial markets, credit allocation and real investment (Zysman, 1989; Amsden, 2001).

Historically, central banks have often been part of the policy apparatus that has helped to guide and provide financing for these important development and transformational projects. (Bloomfield, 1957; Brimmer, 1971; Chandavarkar, 1987; Epstein, 2007). However, with the rise of the "Washington Consensus", the global drive toward financial liberalization and the elimination of so-called "financial repression", central banks were instructed or chose to follow the increasingly prevalent norm of the "inflation targeting" approach to central banking. This approach eschews virtually all goals other than keeping inflation in the low single digits. Its tool-kit was limited to just a few and ideally only one instrument – a short term interest rate (Bernanke et al., 1999; Anwar and Islam, 2011). This approach to goals and instruments was accompanied by a drive to change the governance structure of central banks. Hitherto, they had tended to be integrated into the government's policy apparatus but were also potentially subject to inappropriate influence by government officials. Now, they were able to "independently" implement inflation targeting policy structures and, especially, resist excessive financing of government expenditures. The result objectives" or employment among their top priorities, while most list inflation control as the main goal (Chatani et al., 2014).

Analysts of inflation targeting regimes noted that a "one size fits all" commitment to low single-digit inflation might not be appropriate either for short-term stabilization or for longer term growth for many developing countries (Epstein and Yeldan, 2009; Anwar and

Islam, 2011). They also noted that a single-minded focus on commodity inflation led central banks to ignore asset price inflation, inappropriate financial liberalization and the possibility of asset bubble induced financial crises (Epstein and Yeldan, 2009).

It took the great financial crisis of 2007-2008 to shake up the "Washington Consensus" and raise significant questions about this central banking norm. The crisis has thus created intellectual and policy openings in the global discussion of appropriate economic policies. The ILO study of central bank goals noted that many laws on central banks and speeches from central bankers in developing countries see "economic growth" as an important, if secondary objective (Chatani et al., 2014). At the level of the Bretton Woods Institutions, including the IMF, there has been a process of re-thinking Washington Consensus policies, including with respect to capital controls and inflation targeting (Blanchard, 2011; Grabel, 2012). Re-thinking inflation targeting has raised the issue of multiple mandates for central banks beyond a single-minded focus on low inflation, and a search for multiple tools of central bank policy. The US Federal Reserve, the Bank of England and even the European Central Bank (ECB) have all adopted experimental approaches to central banking, developing new instruments or even dusting off old ones to confront the challenges of financial crisis and economic stagnation.

In the light of these challenges and the evolution of attitudes toward central banking in recent years, it is timely to assess the arguments for broader (or multiple) mandates for central banks, review old approaches and assess new ones for implementing development central banking. This paper offers a brief survey of the arguments in favour of broader mandates for central banking, briefly reviews historical experience, summarizes some recent experience in this type of central banking, and then attempts to answer various questions and objections that have been raised about this approach. It begins, in the next section, with a review of the key lessons, changes in attitudes and approaches towards central banking wrought by the Financial Crisis of 2007-2008.

2. Lessons from the financial crisis of 2007-2008

There are important lessons for the role of central banks in both the build-up to and the aftermath of the Great Financial Crisis of 2007-2008. The financial systems in the US and in Europe which generated this crisis had been subject to successive rounds of financial deregulation, promoted by the banks, which wanted fewer restrictions, and supported by many economists and central bank officials who believed that liberalized financial markets would be more efficient and generate more economic growth. Central banks in the rich countries often saw themselves as the protectors and promoters of this newly liberalized financial sector and helped to lobby governments for more financial liberalization, or, where they had the power, implemented de-regulation themselves (Crotty, 2009). In retrospect, we know that it was these lightly regulated and speculation prone financial systems that were responsible for the financial aspects of the crisis. And when the crisis hit, these same central banks used billions and even trillions of dollars to rescue these same financial institutions, thereby providing a massive subsidy to a subset of one industry in these countries.

There are two lessons here for our discussion of development central banks. First, as history shows, central banks have often promoted and subsidized one industrial sector of our economies, that being the financial sector. So it is not correct to say that modern central banks do not engage in subsidized credit allocation. The second lesson is that the type of development or promotional activities that they engage in makes a big difference. In this recent experience, the type of financial activities that central banks subsidized and promoted ultimately proved to be rather destructive. Looking ahead, it would seem that, if anything, a more constructive type of financial sector promotion is certainly called for, one that contributes to the social productivity of the economy.

There are also lessons to be learned from the aftermath of the crisis. Following the crisis, the United States and Europe have been mired in a state of political paralysis that is leading to a new norm of fiscal austerity, high unemployment and, in the case of Europe, economic stagnation. With fiscal policy orientated around austerity, it is the central banks, the Federal Reserve (the Fed) in the US, the Bank of England and the European Central Bank (ECB), that remain the only macroeconomic authorities with the authority and political power to try to revive these struggling economies.

As in previous severe economic crises, these central banks find that they have to engage in policy experimentation and innovation in an attempt to extract their economies from the jaws of crisis (IMF, 2013). The Federal Reserve created multiple new mechanisms and facilities to carry out "lender of last resort" activities and engaged in three rounds of quantitative easing (QE). The Bank of England also implemented QE and instituted special facilities to promote home mortgages. The ECB has been more constrained by the perceived opposition of Germany and certain constitutional strictures, but, nonetheless, has instituted special small business loan facilities and is likely also to implement QE, probably sooner rather than later.

Moreover, at the Fed, under both Janet Yellen and Ben Bernanke, there has been a shift from inflation targeting to employment targeting, as the jobs crisis is ongoing and inflation is securely in check.

These attempts to develop new instruments with which to implement monetary policy, and sometimes emphasize new targets have been endorsed even in some unlikely bastions of orthodoxy. In a highly publicized presentation, Olivier Blanchard, Chief Economist at the IMF insisted (March, 2011),

Before the crisis, mainstream economists and policymakers had converged on a beautiful construction for monetary policy. [...] we had convinced ourselves that there was one target, inflation. There was one instrument, the policy rate. And that was basically enough to get things done. If there is one lesson to be drawn from this crisis, it is that this construction wasn't right, that beauty is unfortunately not always synonymous with truth. The fact is that there are many targets and there are many instruments.

While Blanchard was referring primarily to the need for central banks also to target financial stability, his point is actually more general than that. The need for central banks to adopt multiple instruments and targets, however belated its current recognition, is a hallmark of the challenges facing not only central banks in the throes of crisis, but also central banks in economies grappling with the long-term challenges of economic development.

However important it may be for central banks to take on these broader roles and adopt an innovative array of instruments to implement them, it should be emphasized that they cannot "do it alone". Indeed, far from it. This is one of the key lessons of the mismanaged response in the U.S., the U.K. and Europe to the financial crisis. Fiscal policy has abandoned the economy and as a result, all the onus of recovery has been placed on monetary policy. Monetary policy, however, cannot carry the whole burden. Expansionary monetary and credit policy has left interest rates stuck at the zero lower bound, and QE and other modest experiments have failed to revive the economy, however much they may have stemmed a dramatic further decline.

Developing countries, then, must learn two lessons, one positive and one negative, from this chequered response by the rich countries' macro-policy makers. The positive lesson is that, like the Fed, Bank of England and ECB, developing country central banks can play a larger role in meeting the challenges of development and transformation if they eschew the flawed advice to pursue inflation targeting with one instrument, and instead broaden their goals and instruments to tackle those challenges. However, the second, and more negative lesson, is that the broader government and fiscal authorities must do their

share to develop and expand their economies. Central banks cannot do it on their own. In other words, there must be monetary and fiscal cooperation and an attempt thereby to achieve coherence between macroeconomic and development objectives by both the monetary and fiscal authorities. This suggests the traditional advocacy of so-called "central bank independence" needs to be re-visited.

3. What's wrong with inflation targeting?

No matter how much policy makers such as Olivier Blanchard question inflation targeting in the rich countries, it is still widely seen as the current "best practice" for developing countries. Yet this approach has serious limitations as a framework for monetary policy in developing countries (Epstein and Yeldan, 2006; Anwar and Islam, 2011). In its strict form, inflation targeting posits that central banks should have only one objective, low and stable inflation, and should utilize only one policy instrument, usually a short-term interest rate. As a corollary, the conventional wisdom usually promotes the idea that central banks should be "independent" of the government, in order to enhance their ability to reach the inflation target. This is usually justified on the basis of avoiding time inconsistency and resisting pressures from governments to finance fiscal deficits.¹

Even if one believes that this general approach is a good one, a key question arises: what is the appropriate inflation rate? The standard practice is that countries should try to maintain inflation in the low single digits (Anwar and Islam, 2011). Where does this number come from? One might expect that a number designed to guide the making of monetary policy in many parts of the globe would come from rigorous research and a broad consensus that the optimal rate of inflation for developing countries is in the low single digits. However, nothing could be further from the truth.

The theoretical case for an optimal inflation rate in the low single digits is very weak, largely because inflation plays no central role in the fundamental general equilibrium models that underlie most welfare analysis. In terms of growth theory, the results are ambiguous. Early work by James Tobin (1965) and Foley and Sidrauski (1971) shows that higher inflation can lead to higher economic growth by lowering the rate of return on financial assets relative to real capital and thereby leading to more investment. Under some model parameters or different model structures, though, the impact can go the other way. Hence the issue comes down to an empirical question.

On the empirical front, however, there is no credible evidence that inflation in the low single digits is the optimal inflation rate for developing countries. Bruno and Easterly (1996) find little evidence of a negative relationship between inflation and growth with inflation rates less than 40%. More recent studies, including those that look at non-linearities and threshold effects find that, for developing countries, growth starts declining on average when inflation rates hit between 14% and 18%. (Pollin and Zhu, 2009; Anwer and Islam, 2011). This is a far cry from 4 6% or less, which is a typical target range for developing countries.

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¹ Proponents of inflation targeting often distinguish between "goal independence", i.e. who determines the inflation target itself, and "instrument independence", i.e. who determines the means of achieving the target. The standard advice is that governments, in conjunction with the central bank should choose the goal (target) and the central bank should have the independence to determine and implement the means. This is often, however, a meaningless distinction. Firstly, once a country adopts an inflation targeting regime, by convention it also adopts the range of inflation targets that are commonly promoted: these are in the low single digits. Secondly, once the basic framework is adopted in which the instruments are limited to only one major target (short-term interest rates), the policy response is pretty much predetermined. In this case, the global "norm/conventional wisdom" of inflation targeting as currently conceived imposes a strict framework that often gives central bankers, who usually endorse this policy, the upper hand in the relationship.

This raises the question of why inflation targeting regimes identify such a low inflation rate as the optimal rate, even though there is no evidence that this is valid in the case of developing countries. There is accumulating evidence that a long-standing suspicion about group preferences with respect to inflation, going back at least as far as Keynes, is true: namely, that the financial sector has a stronger dislike of inflation than other groups in society (see, for example, Jayadev, 2008), and that this dislike of inflation helps to explain central bank behaviour (Epstein, 1994; Posen, 1995).

This inflation aversion of the financial sector also points to a problem with so-called central bank "independence". In a democratic society, there is no such thing as political independence. All institutions are political in nature and need political constituencies to protect their authority and prerogatives. "Independent" central banks typically nurture close relationships with finance for support, leading to a political and economic symbiosis (Epstein, 1994). As Milton Friedman noted decades ago, independent central banks are likely to be too close to the "commercial banking" sector rather than making policy in the public interest (Friedman, 1962). As a result, independent central banks often tend to pursue excessively anti-inflationary policies.

Choosing the wrong target would not matter if undershooting had no negative impacts on important economic variables, such as employment, wages and growth. In practice, however, it would seem that excessively restrictive monetary policy can lead to excessively high real interest rates, and, with open capital markets, can lead to capital inflows, overvalued real exchange rates, and harm exports and reduce employment and growth (Epstein and Yeldan, 2009; Rodrik, 2008).

In practice, targeting inflation with increases in interest rates might be a startlingly incorrect assignment of instruments to targets. Much inflation in developing countries is due to supply or external shocks (Heintz and Ndikumana, 2010; Anwar and Islam, 2011). Responding to a supply shortage or an external price increase with a policy designed to reduce domestic demand can sometimes add insult to injury. It could worsen the problem by reducing capacity further or, in the case of external shocks, create collateral damage by leading to an over-valued exchange rate.

A further key problem for inflation targeting in developing countries, is that the transmission mechanism between traditional monetary policy and the macro-economy in many developing countries is weak (Mishra et al., 2010; Mishra and Montiel, 2012). The main problem is that when the central bank increases the money supply to try to lower interest rates and expand credit, the banking system is not very responsive. It often fails to lower interest rates on loans proportionally, thereby allowing interest margins to rise. This increases their profits but does not commensurately lower the cost of credit. Moreover, the financial system often fails to provide new credit to relatively underserved groups, such as small businesses (SMEs) or small farmers. On the other hand, when the central bank increases interest rates in an attempt to slow inflation, the commercial banks are quick to increase rates and widen interest rate margins.

Clearly, a restructuring of the financial system will be required if monetary policy is to be more effective in achieving any targets, including inflation control.

These examples illustrate a key flaw in the conventional arguments for inflation targeting: the idea that by delivering a low and stable inflation rate, inflation targeting central banks will help deliver both macroeconomic stability and economic development objectives to developing economies. The conventional argument is that stable prices will be sufficient to provide macroeconomic stability and that if there is macroeconomic stability (and other appropriate market institutions such as appropriate property rights) then private investment will flourish and economic development is likely to follow. (In the extreme version of this argument, inflation targeting and appropriate property rights enforcement is sufficient to deliver both macroeconomic stability and economic development).

However, as the previous examples illustrate, inflation targeting by central banks does not necessarily deliver macroeconomic stability. In developing economies with liberalized domestic financial markets and with economies integrated into global capital markets, inflation targeting can be associated with de-stabilizing capital flows and outflows (sudden stops), cycles of over-valued exchange rates and crashes, destabilizing allocation of credit to real estate and other types of speculation. The consequence is short-term investment cycles that hinder long-term investment in industries associated with dynamic comparative advantage, upgrading and long-term employment generation (Epstein and Yeldan, 2009; Ros and Galindo, 2009).

In other words, macroeconomic policy focused on inflation targeting is likely to deliver neither macroeconomic stability nor economic development.

Partly as a result of these problems, many central banks implement inflation targeting more in the breach than in the practice. Missed inflation targets have become commonplace even in countries that claim to adhere strictly to their target. While some take this as evidence that central banks are losing discipline, it might be more accurately taken to reflect that inflation targeting is an inappropriate framework for macro-policy guidance for countries trying to navigate the treacherous waters of a financialized global economy.

What is the advantage of pretending to adhere to strict inflation targeting when, in fact, like their counterparts in the developed world, developing country central banks are innovating and experimenting out of necessity to deal with the economic problems they face.

Would it not be better for these central banks to admit that achieving a moderate level of inflation is an important goal, but only one of several important issues facing their economies? In that case, central banks could play a more active role as part of government initiatives to confront the major macroeconomic challenges facing their economies.

4. Development central banking: Historical precedents

If inflation targeting is not the best monetary policy framework for achieving broad economic and social goals, then what kind of central bank frameworks –goals, governance and instruments – are likely to best help developing countries address the key problems they face? Important lessons can be learned from history with respect to the kinds of central bank frameworks that have been tried and those that have been successful in achieving macroeconomic stability and economic development (Epstein, 2007, 2013)

Historically, central banks in both developed and developing countries have done as Olivier Blanchard suggested: they have focused on multiple targets and, following the rules of Tinbergen, utilized multiple instruments to achieve these targets (Tinbergen, 1952). Following the Second World War, central banks in Europe and Japan utilized interest rate ceilings, subsidized credits and other credit allocation policies to facilitate economic reconstruction and industrial upgrading (Hodgman, 1973; U.S. Congress, 1972, 1981; Zysman, 1983).

Also after the Second World War, there was a major transformation of central banking in the developing world. In many respects, these changes paralleled those in the developed world just described. But in developing countries, central banks were much more emphatically agents of economic development than in many richer countries. As reported in 1957 by renowned monetary historian of the New York Federal Reserve, Arthur I. Bloomfield (Bloomfield, 1957, p. 190.)

During the past decade there has been a marked proliferation and development of central banking facilities in the underdeveloped countries of the world, along with an increasing resort to the use of

monetary policy as an instrument of economic control. Since 1945, central banks have been newly established and pre-existing ones thoroughly reorganized, in no less than some twenty-five underdeveloped countries. In other cases the powers of pre-existing central banks have been broadened in large part the recent growth of central banking in the economically backward areas has also reflected a desire on the part of the governments concerned to be able to pursue a monetary policy designed to promote more rapid economic development and to mitigate undue swings in national money incomes.

Bloomfield goes on to describe the functions, powers, and goals of these central banks (ibid., p. 191).

Many of the central banks...are characterized by unusually wide and flexible powers. A large number of instruments of general and selective credit control, some of a novel character, are provided for. Powers are given to the central bank to engage in a wide range of credit operations with commercial banks and in some cases with other financial institutions.

Some of these measures are admittedly outside the traditional scope of central banking, but central banking in these countries should not necessarily be evaluated in terms of the standards and criteria applied in the more developed ones....the central bank can seek to influence the flow of bank credit and indeed of savings in directions more in keeping with development ends (ibid., p. 197).

Bloomfield also describes the tools of credit manipulation:

..selective credit controls applied to the banking system, through help in establishing and supporting special credit institutions catering to specialized credit needs, and through influence over the lending policies of such institutions, it can help to some degree to re-channel real resources in desired directions, both between the public and private sector and within the private sector itself." (ibid., p. 198).

although he cautions that:

Such measures would for the most part be justified, however, only to the extent that they do not conflict with the overriding requirement of financial stability or involve the central bank in details of a sort that might distract its attention and energies from the effective implementation of a policy aimed at stability (ibid; p. 197).

Writing about the same issue almost fifteen years later (in 1971), another prominent Federal Reserve official, Andrew F. Brimmer, a member of the Federal Reserve Board of Governors, looked back on the experience with "development" central banking in the developing world. Brimmer and his associates describe a variety of techniques that central banks pursued in the 1960s. These included: providing capital to development institutions, such as industrial and agricultural development banks; extending credit to development banks and purchasing their securities; buying a small part of the equity of development banks; establishing a "securities regulation fund" to create a market for the securities of various development finance institutions, by using the profits from the ordinary operations of the central bank; using differential discount rates to allocate credit to capital development projects; the establishment of portfolio ceilings on activities having a low priority; various types of reserve requirements, including differential reserve requirements to influence the allocation of credit; using import deposit requirements (primarily intended to deal with balance of payments difficulties) to also influence the allocation of bank credit (Brimmer, 1971).

Brimmer, on the whole, is somewhat negative about the effectiveness of many of these techniques, with the evidence from his study providing mixed results about the effectiveness of these policies. The possible trade-off between development central bank and the maintenance of financial and macroeconomic stability is also a continuing concern.

In the late 1980s, an IMF adviser, Anand G. Chandavarkar, revisited these same issues. He referred to the development role of the central bank as a "promotional role". (Chandavarkar, 1987). Like Brimmer, Chandavarkar was somewhat concerned that central banks might overstep their capacities while becoming too subservient to the central government. At the same time, he recognized that in poor countries, central banks, being among the main public repositories of both financial and human capital, had important

comparative advantages and responsibilities to help promote development goals, primarily through promoting a development friendly set of financial institutions.

Alice Amsden reports that the role of medium and long-term financing, often supported by central banking mechanisms as just described, were the key to the "Rise of the Rest" (Amsden, 2000). The countries of the rest, according to Amsden, acquired a manufacturing base in the years prior to World War II and then, after the war, industrialized rapidly, moving eventually into mid-level and even high-technology production (ibid, pp 1-2). Among many other factors, Amsden stresses the important role of finance in the success of these countries, especially the mobilization and allocation of medium and long-term finance for industrialization.

Though not emphasized by these authors, a number of complementary, and key, roles were played in these economies by capital controls: they served to help preserve a stable and competitive real exchange rate by limiting speculative capital inflows; they helped to limit destabilizing leverage on domestic balance sheets by limiting currency and maturity mismatches by companies, governments and households; and they helped to protect the apparatus of subsidized credit and credit allocation mechanisms by limiting capital outflows and cross-border arbitrage (Nembhard, 1986; Epstein, Grabel, Jomo, 2003). Similar policies have been successfully employed as complements to industrial development by many countries, including China, South Korea and Taiwan, among others.

In response to the financial crisis of 2007-2008, interest in capital controls has become more widespread as a prudential management tool. More commonly termed capital management techniques (CMTs), or capital account regulations (CARs), these tools have become increasingly recognized, even by institutions previously opposed to them such as the IMF, to be useful parts of the macroeconomic stability toolkit (Grabel, 2013; Gallagher and Ocampo, 2013; Erten and Ocampo, 2013).

However, it would be incorrect to draw a clear distinction between these "short-term" stabilization aspects of capital account regulations and the longer term impacts on development and structural transformation. Reducing hot money flows, limiting excessive currency and maturity mismatches on balance sheets, limiting capital account driven speculative investments and maintaining a competitive and stable real exchange rate can be crucial to maintaining both macroeconomic stability and the policy space required to achieve economic development and economic transformation (Epstein and Yeldan, 2009; Ocampo, Rada and Taylor, 2009).

5. Development central banking: Targets and instruments and current experience

In the light of the crisis, central banks in the developed world are broadening their approach to central bank policy beyond simple inflation targeting. Some movement toward embracing a broader set of concerns beyond a single minded focus on inflation can also be found in the developing world. Chatani et al. find that the founding statements of 40 out of the 51 developing country central banks they studied include "economic growth" as an objective of policy. Eighteen of the 40 place growth as a secondary concern after price stability, but the other 22 either place growth on a par with price stability or place it above price stability on the priority list (Chatani et al., 2014).

They also find that 38 out of the 51 central banks in the study include exchange rate stability as an objective.

Thus, a significant number of central banks have multiple targets even if price stability is one of the most important, or even the most important. Chatani et al. (2014) also include a content analysis of speeches by central bankers in their sample. These speeches are

consistent with their findings from the founding documents: most speeches mention price stability, but many also mention economic growth and investment as an issue of importance. Relatively few speeches, however, mention employment as an important issue, despite the obvious importance of employment to broad-based social well-being (Chatani et Al., 2014).

A handful of central banks in the developing world are embracing more specific development goals and developing a broader set of tools to achieve these goals. The Central Bank of Bangladesh has pioneered a variety of policies partnering domestic commercial banks and local cooperative institutions. They include providing subsidized credit for small businesses, improving renewable energy use in agriculture while increasing assets for small farmers and helping to develop agricultural assets for landless farmers (Epstein, 2013; Muqtada, 2014). The Central Bank of Argentina has also adopted a new set of development mandates (Del Ponte, 2013; Epstein, 2013). In March 2012, the Argentine Parliament approved a new charter for the Central Bank of Argentina, a charter that embodies some key goals of development central banking. Article 3 of the new Charter states that "the purpose of the Central Bank is to promote monetary stability, financial stability, employment and economic development with social equity, within the scope of its powers and under the framework of the policies determined by the national government." (Del Ponte, 2013; Central Bank of the Republic of Argentina, July 2012). Perhaps most importantly, the reform allows the bank to provide funds for domestic banks and other financial institutions involved in the financing of long-term productive investment.

These new initiatives include:

1. Medium and long-term lending for productive investment

The Central Bank has initiated the "Bicentenary Productive Financing Programme" with the aim of increasing productive investment. To do this, the Central Bank gives a line of credit to banks to enable them to make longer term loans (a minimum of 2 ½ years) to finance longer term productive investment. (BCRA, 2nd Half 2012, p. 8) The Central bank instructed banks to set up a credit line for the financing of investment projects. The loans are for a term of 24 months or more, (with an effective maturity of at least 36 months) with a fixed interest rate of no more than 15% annual. By the end of 2012, each financial institution with at least 1% of the country's deposits, or which act as government agents, should have granted an amount equivalent to 5% of its deposits. Half of this was to be granted to micro and small and medium-sized companies.

2. Extending the geographical coverage of banking

A new system for licensing branches was implemented to encourage the extension of banking facilities to under-served areas. This should reduce financial exclusion and provide the basis for more credit provision later.

Unfortunately, the Argentinian economy has been faced with a number of difficulties resulting partly from the political and economic fallout from the crisis of the early 2000s, and compounded by shocks from the global financial crisis. As a result, the central bank is finding it challenging to implement these new policies to the full. Nevertheless, the change in mandate is significant and when the economy stabilizes, presumably it will have more breathing room to implement this new approach more fully.

In a number of countries, broader central bank activities are taking place under the umbrella of financial inclusion policies (World Bank, 2013, 2014). For example, the Ecuadorian Central Bank has explicitly adopted a financial inclusion mandate (Arias, 2014). This mandate includes utilizing central bank initiatives to increase banking and finance access to the unbanked (Arias, 2014). The Ecuadorian case is interesting because it shows that a broadening of central bank mandates is possible even in a highly dollarized environment. Cambodia is another case of a highly dollarized economy in which the

Central Bank has explicitly adopted a policy of trying to enhance financial inclusion. (Vouthy et al., 2014).

In the case of Pakistan, the central bank has historically had the mandate to play a broad role in promoting financial institutions and providing financial support for underserved sectors such as agriculture, small and medium-sized enterprises and manufacturing. With the rise of financial liberalization, these roles have been significantly reduced, but much of the legislation underlying these broader roles remains in place and could be re-activated, should the government choose to do so (Sayeed and Abbasi, 2014).

Despite some increased movement along the lines of broader initiatives, increased concern for growth promoting central bank activities, more official sanction for policies of financial inclusion and some types of capital management techniques, these initiatives are still relatively small and still concentrated in a relatively few countries. To some extent, they have been limited by the continued strength of the persistence of the conventional wisdom concerning the need for inflation targeting and central bank independence as key bulwarks of macroeconomic stability and prudent macro-economic governance. The next section addresses some of the common concerns over development central banking.

6. Questions about development central banking

The upshot of the discussion so far is that the Great Financial Crisis has generated some cracks in the "new monetary consensus" of one target (inflation) and one instrument (the policy interest rate) with a recognition that it is not sufficient to meet the macroeconomic and development challenges that many countries face. These cracks are broad ranging and include: discussions at the centres of macro-policy orthodoxy, such as the IMF; debates over central bank mandates that highlight the dual-mandate of the Federal Reserve (high employment and price stability); the emphasis from the Bank for International Settlement (BIS) and elsewhere on the need for central banks to take into account financial as well as price stability; the monetary experimentation in core central banks; creation of development central bank mandates in several countries including Bangladesh, Argentina and others; and finally, the flagrant violation of inflation target strictures by many central banks that claim to engage in "inflation targeting lite".

Nevertheless, central banks and policy makers more generally have been reluctant, to put it mildly, to embrace a new consensus that central banks should become integral partners in a macroeconomic initiative to confront key challenges. The consensus, at best, is that there can be some tinkering around the edges of inflation targeting. This is indicative of a reluctance to recognize the broad changes that are actually taking place in monetary policy management in response to the crisis.

Possible objections that have been raised to a more development approach to central banking and some responses to these objections include the following. First, why is the "assignment problem" not the most efficient solution to this problem? According to Tinbergen, there should be as many instruments as targets. So why not just assign the central bank to macroeconomic stability and the fiscal authority to development? There are many problems with this solution. As discussed above and further below), even achieving macroeconomic stability itself requires more than simply targeting inflation. In addition, there is too much uncertainty in macroeconomic policy making so that there needs to be genuine coordination and learning by doing. Finally, as Tinbergen noted, policy instruments are not independent of each other. Thus changes in one instrument, say the interest rate, will not only affect inflation, but will also affect employment and the real exchange rate, which have a big impact on development. It has been known for decades that these instrument interdependencies can render a decentralized "assignment problem" costly and even unworkable.

The second objection is that there is a trade-off between development central banking and macroeconomic stability. It is true that, in the past, some developing countries that had central banks with broad powers and little distance from government, were part and parcel of macroeconomic regimes that were associated with failed macroeconomic policies. At the same time, there are many examples, as described above, where central banks that were partners in development-oriented macroeconomic policies led to more rather than less economic growth and macroeconomic stability. In these cases, such as the industrializing Asian countries and Europe and Japan after the Second World War, directing credit to rising industries rather than commodity or real estate speculation actually contributed both to macroeconomic stability and to economic development. Here macroeconomic stability and development were complementary results of development central banking, not substitutes. The lesson then is simple: the need is for good policies and appropriate policy coordination, together with appropriate checks and balances, so that central banks can play a positive role in fostering both macroeconomic stability and development. Pretending that a singular focus on inflation control will lead to either macroeconomic stability or economic development is not, as has been observed, a winning policy.

A third and related concern is that if central bank policy becomes too highly coordinated with government policy, including fiscal policy, then the some governments will try to abuse their powers with respect to the central bank by exerting inappropriate pressure on it to fund fiscal deficits, or even to support cronyism or corruption. In some countries, or even in all countries at some time, these worries may be legitimate. It may be wise, then, for there to be checks and balances, including a certain degree of operational independence, to give the central bank some insulation from direct control by the government. At the same time, it is often important for the central bank's policies to be coordinated with the government's development plan. For example, even corrupt governments usually have development plans. The central bank could usefully orient its policies around promoting the key macroeconomic goals of the development plan, even when a corrupt government is failing to achieve the plan. In this case, of course, this might entail the central bank leaning against the wind with respect to the government's actual policies, though not the government's publicly announced development plan. In the more common, and general, case the central bank's policies would be coordinated with those of the government.

A fourth objection is that central banks do not have the knowledge to generate employment, support investment in key industries or target the real exchange rate. While there might be some truth to this, rather than supporting the continuation of a focus on inflation targeting, it points to a key reason why a broader mandate is useful and even necessary in many countries. Central banks in developing countries often have one of the largest pools of highly trained and skilled economists and technicians. In an inflation targeting regime, this collection of highly scarce human resources is being utilized to learn everything that can be possibly learned about movements in commodity prices and their connection to monetary policy. They spend almost no time or energy learning how monetary and credit policy affects employment, skills upgrading, technological development and sectoral growth. If central banks were given a broader mandate, then their staff would have to learn more about the economies in which they operate. They might have to talk to labour ministries, agricultural ministries, and women's associations about how their policies affect women and children and the environmental ministries about the impact of policies on the environment. In this case, some of the skilled labour in central banks can be deployed to understand how monetary policy can affect these broader issues and this would be likely to generate a considerable increase in their social and economic productivity.

A final objection is that one should not ask central banks to do too much. Central banks cannot do everything; they are not a panacea.

This point is well taken. Central banks should be seen as one key macroeconomic and financial institution that must work in concert with other key financial and macroeconomic institutions. As discussed earlier, latterly Asian country developers have utilized development banks to help finance and coordinate their industrial policies. Today, development banks can once again play key roles in helping to mobilize long-term or patient capital for development purposes. Central banks can play a supporting role in providing lines of credit, credit guarantees, and the like for high quality projects. They can further help out by maintaining a stable, competitive exchange rate. Lastly, they can help by playing a coordinating role among various macroeconomic and sectoral agencies and private finance.

So it is true that central banks cannot provide all of the solutions to the development challenge. However, if they abandon or at least strongly modify their current inflation targeting structure to become more development-oriented, they can become a much bigger part of the solution than they have been in recent years.

7. Conclusion

In the light of these arguments, there is a strong case that, in general, central banks should play a broader role in helping developing countries meet their key challenges, such as reducing unemployment, generating more decent work, helping to allocate investment to productivity enhancing activities and helping to tackle the challenges of climate change. Much more work needs to be done to better understand the optimal institutional and governance structures for central banks in different settings, the types of goals and instruments most appropriate for different challenges, and the best kinds of monitoring frameworks to make sure that central bank policy has the checks and balances it needs to carry out its stabilization function while implementing its development goals. Finally, it needs to be better understood how the central bank can work effectively with other key institutions, such as development banks, specialized financial institutions and a variety of government ministries and private actors while, at the same time, ensuring that it is not over-burdened with tasks better undertaken elsewhere. To answer these questions, more case studies are required since, in the end, though general lessons are helpful, the true solutions are to be found in specific national settings.

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