Centre for Economic Policy Research
POLICY INSIGHT No. 46
MARCH 2010

On the benefits and costs of a monetary union

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Why would countries share a single currency? A group of partner countries may decide to form, or join, a monetary union in expectation that the current and future benefits exceed costs. Yet, there is no all-inclusive welfare analysis to estimate the net benefits from sharing a single currency. Rather, a variety of tools are employed to gauge partial views on diverse benefits and costs. This gives an opportunity to supporters as well as sceptics of monetary unions to cast their arguments by giving different emphasis and weights to the various benefits and costs. This note flags some aspects that seem missing in the current debate on the merits of the Eurozone.

Benefiting from monetary union is a matter of time, seizing opportunities, and perseverance.

According to conventional wisdom, this analysis is rather straightforward. The macroeconomic costs of losing influence over macroeconomic stabilisation, due to the loss of direct control over monetary policy and the exchange rate, are set against diverse microeconomic gains of improved efficiency. In reality, the benefits and costs from sharing a single currency are more varied than that. On both sides of the equation they must be assessed in terms of microeconomic efficiency, macroeconomic stabilisation, and overall external effect. They can be quite diverse in nature, time profile, and on a country-by-country basis.

We must keep in mind that the Eurozone is part of a broader process of economic, financial, and institutional integration that started in the 1950s. This 60 year-long process has political origins and positive economic effects. There are two implications from this progression.

- The first is a transformational one. All along, national economies have had to adjust to the changing institutional frameworks. Their market structures have also been transformed. It is fair to say that the gains for all European have been enormous. All EU countries are now very interdependent – each has an increasing stake in the wellbeing of the others.
- The second implication is an institutional one. The EU, and therefore also the Eurozone, are formed by sovereign countries that are increasingly integrated, but still maintain a wide control over diverse national economic policies. Hence we need good monetary governance and also good fiscal governance.

While Europe has been changing, the world has been rapidly changing as well. Over the last 15 to 20 years widespread financial deregulation and liberalisation has changed the financial system in ways that nobody was able to fully grasp. This note argues that, at its heart, benefiting from monetary union is a matter of time, seizing opportunities, and perseverance. But we must not shy away from lessons to be learnt.

Benefits from microeconomic efficiency

There is an increased usefulness of money stemming from the liquidity services provided by a single currency circulating over a wider area – as a unit of account, medium of exchange, standard for deferred payments, and store of value. This benefit hinges on good monetary governance by the ECB. It is subject to a 'network externality' – the larger the international circulation of the euro, the higher its usefulness.

Inside the Eurozone, nominal exchange rate uncertainty has disappeared, leading to savings in transaction and hedging costs. This fosters trade, lowers investment risk, and promotes cross-country foreign direct investment (FDI) within the Eurozone. There is by now solid empirical evidence for all three beneficial effects. Intra-Eurozone trade in goods and services has already risen by 5 to 10% on average from already very high levels of openness (Baldwin et al. 2008).

Remarkably, there is also no 'fortress Europe' as the euro has stimulated trade not only across the Eurozone, but also with the rest of the world. We have witnessed a sharp increase in FDI flows among Eurozone countries. In particular, higher cross-border mergers and acquisitions within the Eurozone have led to restructuring of capital within the same sector of activity – raising the overall efficiency of the Eurozone. Broadly speaking the euro is already having a catalysing effect, which is often referred to as 'endogeneity of

optimum currency area', which argues that sharing a single currency sets in motion forces that bring countries closer together (see Mongelli 2008 and ECB 2008).

The launch of the euro has also brought a significant deepening of financial integration, albeit unevenly across financial market segments. So while we see more portfolio diversification (both for equities and fixed income), cross-border banking integration has advanced only slowly. Looking ahead, financial integration is likely to rise further with declining cost of equity capital and bond financing. Yet below the surface financial integration and sophistication also came with some negative externalities. The excessive complexity of new financial products made it increasingly difficult to properly rate the risks embedded in opaque financial innovations, especially when bad risk management, adverse incentives, and moral hazard distorted their use. Regulators and supervisors, as well as rating agencies often misjudged the disruptive potential of such new instruments. The private and public sectors of Eurozone countries were unevenly exposed and subsequently hurt when the crisis erupted.

The euro has stimulated trade not only across the Eurozone, but also with the rest of the world.

Last, some other benefits are instead materialising only slowly. For example, we might have expected that, over time, greater price transparency would discourage price discrimination and decrease market segmentation, through higher competition across the Eurozone.

Benefits from improvements in macroeconomic stability

The ECB is highly credible, and inflation in most Eurozone countries was never as low as it was since the launch of the euro. Moreover, inflation expectations have remained well anchored since the launch of the euro, and even during the financial turmoil which then morphed into the ongoing financial crisis. Overall price stability has been instrumental in securing the lowest interest rates on a two-, five-, ten- or even fifty-year basis. For many Eurozone countries this represents a very significant benefit, for example by lowering public debt servicing and supporting investment and growth. The reputational gains for those members with a history of relatively higher inflation are substantial. This framework has also supported overall macroeconomic stability. Over the last decade average per capita growth in the Eurozone and the US were very similar. Moreover, average GDP growth rates of high performing Eurozone countries were even higher than most adjacent non-Eurozone EU countries.

Macroeconomic stability is supported by increasing opportunities for financial based risk sharing in the Eurozone. Increasingly integrated financial markets and diversified portfolios are having important effects. Eurozone residents holding equities issued in other countries will be better insured against swaying domestic equities. This in turn reduces the extent to which firms' and households' saving and spending decisions are dependent on domestic economic and financial developments. In other words, domestic consumption in Eurozone countries does not need to follow movements in domestic output as closely as before the euro. From a macro-standpoint, the credit and risk-sharing channels can increasingly contribute to soften the impact of asymmetric shocks in a specific Eurozone country or sector. (It has been shown that in the US, financial markets permit absorption of a larger share of asymmetric shocks among US States than the US Federal Budget.) This is often referred to as 'consumption smoothing'.

There is a crucial corollary of financial based risk sharing: complete 'convergence' of Eurozone countries and total harmonisation of their economic development is no longer indispensable. Actually, financial based risk sharing benefits from some heterogeneity within the Eurozone.

The Eurozone has shown resilience to external developments and shocks. In fact, more resilience than most of its individual member countries ever exhibited before the launch of the euro. The risk of possible speculative attacks on national currencies has been removed and national economic policies have become better coordinated. For example, prior to the launch of the euro, the impact of movements by the Deutsche Mark against the US dollar was often aggravated by similar movements between the currencies that have now merged to form the euro. This can no longer happen. All major shocks of recent years have not played an important role in the dispersion of output growth within the Eurozone. In other words, they have not contributed to economic divergence.

A caveat is in order. Greater resilience does not imply insulation. Recent financial events have shown that financial market discipline is alive and well and investors and rating agencies differentiate between sovereign borrowers even within the Eurozone i.e. they can still send very powerful signals. This puts an even greater prize on securing the highest level of fiscal governance and unassailable fiscal sustainability to avoid punishing sudden reassessments of sovereign credit-worthiness with unforeseen and escalating consequences (like a destructive blaze). This is an important lesson for the future.

There are benefits from the international role of the euro

There are various benefits from the worldwide circulation and use of the euro such as lower costs of conducting international transactions. In the case of the euro, its international role is determined by the investment decisions of private agents and public authorities outside the Eurozone, in competition with other currencies. The 'vehicle currency' role in international trade, in particular in the countries close to the Eurozone, lowers the cost of conducting international transactions for Eurozone residents, and

for financing and investment purposes. Moreover, international policy co-operation is also simplified.

Costs from the deterioration in microeconomic efficiency

There were various changeover costs that resulted from the switching to a new currency. These costs included administrative, legal, and hardware costs such as re-denominating contracts and adapting vending machines. This is a one-off cost. A neo-classical optimal public finance argument against relinquishing monetary sovereignty is that joining a monetary union prevents a national government from equalising the marginal cost from taxation and inflation i.e. losing control over the 'inflation tax'. This cost has been completely overturned by the empirical realisation of the lasting detrimental effects of 'above optimal' inflation and price instability). In other words, the loss of the inflation tax may actually qualify as a benefit.

We could also add the psychological costs resulting from a new numéraire. Moreover, it has been argued that with bounded rationality, these costs can be substantial over time. In some countries perceived inflation may have been propped up by the lax monitoring by several national authorities of unjustified price changes for several goods and services.

Costs from decreased control over macroeconomic stabilisation

In a monetary union the menu of policy instruments under direct control of national governments narrows down. The single monetary policy is with the ECB. Some Eurozone countries exhibiting higher nominal price and wage rigidities than the Eurozone average, are likely to incur in higher frictional unemployment (at least until such rigidities are reduced by means of structural reforms). Ceteris paribus, this may eventually lead to more pronounced short-term output and employment fluctuations in the member country with less flexible labour and product markets. Moreover, national governments also lose the option of 'inflating away' their national debt i.e. there can be no 'gradual default' by unanticipated inflation. As we already argued above, this is no panacea (and this is actually a good thing).

The EU, and therefore the Eurozone, lacks a supranational risk-sharing arrangement akin to the US Federal Budget or to the arrangement among German Lander that would permit to partly absorb any temporary asymmetric shocks at the level of the different member countries. This cost is somewhat mitigated by the increasing, albeit from a low level, financial-based risk sharing. Moreover, at a national level automatic stabilisers are even better stabiliser than any public sharing arrangement.

A single monetary policy among sovereign countries requires some common fiscal restraints as is the case with the Stability and Growth Pact for the Eurozone. The aim of the pact, that has a preventive and corrective arm, is to foster sound fiscal policies and avert unsustainable national fiscal policies under all circumstances. Such restraints are relatively more binding for countries with relatively higher public debt and a proclivity to run higher budget deficits. In any case, the importance of sound fiscal policies cannot be over-emphasised. Eurozone countries need to keep room for manoeuvre for their automatic stabilisers and to match any challenge coming from population ageing, environmental concern, and the need to reform and innovate. The net benefits from the euro depend on it. A lesson from the ongoing crisis – and the fast 'acutisation' of budget deficits (particularly pronounced in one country) – is that fiscal governance must be strengthened in letter but foremost in principle.

> If one or more member countries run sizable budget deficits, and accumulate unsustainable debts, there are adverse consequences for all members of the union.

The initial years of the euro have shown how there can be significant gains and losses in competitiveness even in a relatively short time-period (see Mongelli and Wyplosz 2009). How was that possible? What we have learned is that even modest, but persistent, inflation differentials by some countries can erode, or strengthen, relative competitiveness. In other words, real exchange rate parities among Eurozone countries have changed since the launch of the euro. If a country chooses the wrong nominal parity at the onset of a monetary union – this country may be too competitive or too un-competitive with respect to the other members. The imbalance in the external accounts will likely persist until the structure of prices and wages, as well as the level of economic activity, adjusts to those prevailing in the other members. Within certain boundaries this may not be problematic, but over long stretches of time this is not desirable and may expose deficit countries to persistent losses in domestic economic activity. The burden of adjusting would fall correspondingly more on the deficit countries. Perhaps for the latter, the inability to devalue prevents an escape route often used in the past by some. This may be perceived as a significant cost. Yet, this too is not a panacea. Let us explain why.

We know that gains from nominal devaluations are generally limited and short-lived. Moreover, periodic devaluations entail higher interest premia and are associated with lower employment and slower growth over the medium to long term i.e. devaluations may create new hurdles to growth on their own. Hence, economic theory and empirical analysis have provided various arguments that tend to reduce this cost.

Costs from adverse external effects

An old issue is the loss of direct control of part of national foreign exchange reserves and other assets that are transferred to the newly established supranational central bank. This cost is mitigated by the fact that joint reserves may have a proportionally higher bearing. Some

countries are putting small shares of their historical reserves to new uses. Fiscal governance has proved a challenge for some countries since the launch of the euro. If one or more member countries run sizable budget deficits, and accumulate unsustainable debts, there are adverse consequences for all members of the union (pecuniary externalities) particularly those that previously had sound fiscal figures and stable legacy currencies. The remedy to reduce such costs lies in the fiscal governance and the implementation of the Stability and Growth Pact.

Closing remarks

The current debate on monetary unions is focused on some narrow trade-offs. This note has instead shown that there are a broad range of benefits and costs and that the balance of judgements has shifted in favour of monetary unions. They are deemed to generate fewer costs and there is now more emphasis on their benefits (at least up to the present crisis). There is also clear evidence that the economic benefits of the Eurozone have come through, and the monetary part has also been a success.

The Eurozone has exhibited low actual and expected inflation, low interest rates, greater macroeconomic stability, higher employment and participation, and very high resilience to many shocks

An underlying asymmetry is not receiving enough attention however. Some costs are incurred at the start of monetary unification, such as the changeover cost and the investment to set up a sound institutional framework. Instead, some benefits accrue gradually as the new currency gains acceptance; its circulation widens, and as economic and financial integration deepens. Encouragingly, there is evidence that the euro is already having endogenous effects and catalysing even further integration among Eurozone countries. In other words, time plays an important role.

Despite evidence of economic and financial integration, Eurozone countries are still quite heterogeneous and are likely to remain so for the foreseeable future. It is unlikely that differences in legal systems, financial structures, and various other domestic characteristics, institutions and preferences will rapidly fade out. Is that a problem? Various commentators have argued that heterogeneity should not be overstated. Moreover, financial based risk sharing will increasingly contribute to smoothing asymmetric shocks.

Over the last decade the Eurozone has exhibited low actual and expected inflation, low interest rates, greater macroeconomic stability, higher employment and participation, and very high resilience to many shocks. Yet the euro cannot safeguard Eurozone countries from the effects of real economic shocks, although it can smooth their impact and facilitate the adjustment process. Neither can the euro safeguard from the build-up of domestic imbalances. That is to say, neither current account deficits nor budget deficits can be allowed to spin out of control. These are two important lessons. Imbalances must be checked and reversed. This realisation is part of a learning process and is being heeded.

Fiscal governance must be strengthened in various ways to prevent the emergence of a crisis spinning out of control and setting back the economy.

What else have we learned? That the costs of monetary union also hinge on the ability of each country to enhance its dynamic adjustment. In fact, the cost of slow dynamic adjustment and responsiveness is an order of magnitude far above all other costs. It is also still poorly researched and poorly explained to the general public. In essence, this is a cost from not undertaking structural reforms and liberalisations. For many countries, reforms were postponed for too long and would have been even more complex to undertake without the euro i.e. assuming that peer-pressure and market discipline help. In other words, opportunities should be seized.

Recent events are showing that what has been achieved by EMU thus far cannot be taken for granted, but needs instead to be nurtured. Discipline from financial markets can send signals and pose tremendous new challenges. Hence, another lesson is that fiscal governance must be strengthened in various ways to prevent the emergence of a crisis spinning out of control and setting back the economy. In other words, perseverance plays an important role.

Ultimately we need to be humble in the face of new events, interpret them carefully, and learn any new lessons. The success of the euro requires new economic governance with broad ownership and an assessment of how systemic risks have now changed and are still changing. Hence, at its heart, benefiting from monetary union is a matter of time, perseverance, and seizing opportunities.

Disclaimer: This note reflects only my personal views and I am solely responsible for its content. *I am grateful to Lars Jonung and Charles Wyplosz for their comments.*

References

Baldwin, Richard, Virginia DiNino, Lionel Fontagné, Roberto A De Santis, and Daria Taglioni (2008), 'Study of the Impact of the Euro on Trade and Foreign Direct Investment', European Economy, Economic Papers, Brussels, 321. May.

Mongelli, Francesco Paulo (2008), 'European economic and monetary integration and the optimum currency area theory', DG ECFIN, Economic Papers, 302, February.

ECB (2008), 'Monthly Bulletin: 10th Anniversary of the ECB', May.

Mongelli, Francesco Paulo and Charles Wyplosz (2009) 'The euro at ten – unfulfilled threats and unexpected challenges', 5th ECB Central Banking Conference.

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