Leave the euro?

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Evaluating the impact of France leaving the euro zone ("Frexit") is tricky, as many channels for doing this exist and the effects are uncertain. However, given that this proposal is being advanced in the more general debate over the costs and benefits of membership in the European Union and the euro, it is useful to discuss and estimate what is involved.

There is little consensus about the many points involved in an analysis of the issue of membership in the euro. On the one hand, the benefits linked to the single currency 18 years after its creation are not viewed as completely obvious; on the other, it is not evident that the monetary zone has become less heterogeneous, and, possibly linked to that, the current account imbalances built up in the first decade of the euro zone's existence, which have grown since then due to the consequences of the 2008 global financial crisis, are putting constraints on economic policy.

The dissolution of Europe's monetary union would be an unprecedented event, not only for the member states but also from the point of view of the history of monetary unions. Not that there have been no experiences of dissolution – Rose (2007) counted 69 cases of withdrawal from a monetary union since the end of the Second World War – but in many respects these experiences offer little if any basis for comparison (Blot & Saraceno, 2014). Nor do they reveal any empirical patterns that could inform us about the possible misfortunes or chances of success that a break-up of the euro zone might have.

However, the reference to past episodes is not the only tool

with which the economist can carry out an analysis of a breakup of the euro zone. It is indeed possible to highlight the mechanisms that would be at work if the monetary union project in Europe were to be wound up. There are numerous possible pathways to a break-up of the euro zone, and any analysis of the costs and benefits must be interpreted with the utmost since in addition to uncertainty about any caution, quantitative assessment of what is involved, there is also the issue of what scenario an exit would create. In these circumstances, a departure from the euro zone cannot necessarily be understood solely from the point of view of its impact on exchange rates or its financial effects. It is very likely that an exit would be accompanied by the implementation of alternative economic policies. The analysis carried out here does not enter this territory, but merely explains the macroeconomic mechanisms at work in the event of a break-up of the euro zone, without detailing the reaction of economic policy or second-round effects.

The central hypothesis adopted here is that involving a complete break-up of the monetary union, and not the simple departure of France alone. Indeed, if France, the secondlargest euro zone economy, were to exit, the very existence of the monetary zone would be called into question. The devaluation of the French franc against the southern Europe countries remaining in the euro zone would destabilize their economies and push them out of the scaled-down euro zone. We do not deal here with all the technical elements related to how a break-up would be organized [1] – launching the circulation of new currencies, liquidation of the ECB and termination of the TARGET system, etc. - but rather on an analysis of the macroeconomic effects [2]. Two types of effects would then be at work. First, the dissolution of the European monetary union would de facto lead to a return to national currencies, and therefore to a devaluation or revaluation of the currencies of the euro zone countries visà-vis not only their euro zone partners but also non-euro zone countries. Second, the redenomination of assets and liabilities now denominated in euros and the prospect of exchange movements would have financial effects that we analyze in the light of past financial crises. Our scenario is therefore for a contained crisis.

A unilateral exit from the euro zone by France and the ensuing break-up of the euro zone exclude a scenario for a common currency where strong cooperation between the old member states would help to maintain a high level of exchange stability and effectively continue the economic status quo. There is little likelihood of a scenario like this, since it would lead to not using the margins of maneuver opened up by the exit and to maintaining the much-denounced and presumed straitjacket. The crisis would be contained in that the most violent effects would be reduced by coordinated policies. This would mean exchange movements that are rapid and substantial, but which stabilize over a time horizon of a few quarters [3]. We assume, furthermore, that each country pursues its own interest without special co-operation.

I – A summary of the economic mechanisms at work

The gains expected from leaving the euro zone

In the first place, leaving the euro zone would mean that the exchange rates between the currencies of the countries that compose it could once again vary against each other. Given this, the question arises of the value at which the exchange rates of these currencies will tend to converge. The expected gains would be, on the one hand, an improvement in competitiveness due to the devaluation of the franc. A devaluation would lead to imported inflation in the short term, before increasing purchasing power and spurring growth. The second gain involves the possibility of defining a monetary and fiscal policy that is differentiated by country, and therefore more appropriate to France's situation.

An exit from the euro zone would also make it possible to set tariffs less favorable to imports from other countries, and thus more favorable to producers on the national territory, but which would also affect consumer prices and thus consumer purchasing power[4].

The costs of leaving the euro zone

France's exit from the euro zone would lead to the departure of other countries, which would see their currencies depreciate against the franc, especially the southern European countries. The net effect on competitiveness may prove ambiguous.

A Frexit would lead to currency movements, which would translate into a return of transaction costs on currency exchanges between euro zone countries. Moreover, the break-up of the euro zone would also lead to a redenomination of assets and debts in the national currency. Beyond the legal aspects, these balance sheet effects would impoverish agents who hold assets denominated in a depreciating currency or debts redenominated in an appreciating currency (and enrich those in the reverse situation). Uncertainties about balance sheet effects, particularly for financial intermediaries and banks, could be expected to lead to a period experiencing a sharp downturn in lending.

How much additional autonomy would be acquired for monetary policy is uncertain at present. Indeed, it is difficult to conceive of a monetary policy that is much more expansionary than the ECB's policy of negative rates and security redemptions [5]. The Banque de France could, of course, buy back the national public debt by creating money, but, in light of the low current interest rates on French sovereign debt, it is not clear that this would lead to significant gains [6]. It should be noted that a persistent current account deficit would need to be financed by external savings and that this external constraint could affect monetary policy, for example by requiring an increase in short-term and long-term interest rates that could impose capital controls by the government.

Finally, the introduction of trade protectionism would obviously lead to retaliation by the aggrieved partners, which would hurt French exports. The overall net effect on world trade would be negative, with no gain at the national level.

II - The impact on exchange rates and competitiveness

A Frexit would not lead to strong gains in competitiveness. We simulated the effect of a Frexit in the following way:

- We assume that a Frexit would lead to a rapid disintegration of the euro zone;
- 1. We then use our estimates of long-run equilibrium exchange rates presented in Chapter 4 of the 2017 *iAGS Report*. It appears that the equilibrium parity for the new franc would correspond to an actual effective devaluation of 3.6% compared to the current level of the euro. This is a real change, once it has been corrected for the effects of inflation and is effective, that is, taking into account exchange rate fluctuations in relation to different trading partners, possibly in the opposite direction. The new franc would be devalued relative to the German currency, but would appreciate relative to the Spanish currency;
- 2. Using the empirical estimates of exchange rate adjustments (Cavallo et al., 2005), we determine a short-term exchange rate trajectory. Our estimate is for a 13.7% depreciation of France's effective exchange rate with respect to the other euro zone countries, and an appreciation of 8.6% with respect to the countries that do not belong to the euro zone.

Using simulations with the emod.fr model, we estimate a modest increase in competitiveness. The effect on GDP would be close to 0 in the first year and 0.4% after three years. These

figures are low and refer to a scenario without any readjustment within the euro zone. If we consider the possibility of a gradual adjustment within the euro zone (based on the mechanisms, for example, referred to in *iAGS* 2016), the potential gain would be even lower. Once again it is possible to envisage that the monetary policy conducted by the Banque de France would seek to devalue the French currency more strongly than that of its competitors. But in such a scheme, it is very likely that the latter will in turn wish to preserve their competitiveness and engage in a policy of competitive devaluations.

III – The financial impact: The effects of the banking crises

The dissolution of the euro zone and the return to national currencies would have significant repercussions for the national banking and financial systems through their international business, and it would bring about a return of exchange rate risk within the euro zone. We first assess the risks that the collapse of the euro zone would have for the banking system. The mechanisms at work are likely to provoke a banking crisis, which could have a high cost for economic activity.

The return to national currencies in a financially integrated space would necessarily entail a major upheaval for the financial system. These effects would not be comparable to those observed at the time the euro was adopted. Indeed, as Villemot et Durand (2017) have shown, potentially the balance sheet effects would be significant for a low coordination scenario.

The balance sheet effects could be reduced if there were international coordination when leaving the euro. Such coordination would make it possible to distribute the ECB's assets and liabilities in a coherent way, notably within the framework of TARGET 2. However, it's difficult to assume a significant level of coordination when leaving the eurozone, and it is illusory to believe that the difficulties in achieving coordination will lessen. On the contrary, they are likely to increase in a climate of instability instead of one with a shared destiny. As a result, the scenario we use for leaving the euro zone excludes the establishment of a new financial or monetary architecture.

The risk of a banking or financial crisis is central to understanding the impact of the break-up of the euro zone. The impacts would pass through three main channels. The first involves a flight of deposits and savings and the distress liquidation of financial assets. The second is related to the effects of currency misalignments on banks' balance sheets and insurers. The third concerns the sovereign risk that would affect either the public debt and its financing, or if this debt were subject to uncontrolled monetization, the return of intense external pressure. The economic literature includes recent efforts (notably Rogoff and Reinhart, Borio, Schularik, the IMF) to try to evaluate banking or financial crises. It should be clarified at the outset that this literature does not deal with the dissolutions of monetary unions. In the various banking crises recorded since the 1970s by Laeven and Valencia (2010 and 2012), there is no mention of a crisis linked to the dissolution of a monetary union. Nevertheless, the financial dynamics in play in the event of the break-up of the euro zone would be, as mentioned above, risk factors for a banking or financial crisis.

Moreover, the economic literature on currency crises has pointed to the link with banking crises (Kaminsky and Reinhart, 1999). The collapse of a monetary union in reality reflects a crisis situation for the exchange rate system, which leads to revaluations and devaluations with the overadjustment of exchange rates, as highlighted in the previous section. The reference to the cost of banking crises thus illustrates the potentially negative effects of exiting the euro zone. However, it should be remembered that these costs correspond to an overall assessment of banking crises that does not make it possible to identify precisely the mechanisms through which the financial shock is propagated into the real economy — an assessment that would involve identifying the impact of rising risk premiums and the effect of credit rationing, where it is much more difficult to determine the uncertainty. An analysis by Bricongne et al. (2010) of the various channels through which the 2007-2008 financial crisis was transmitted suggests that a significant amount remains unexplained. Also, in the absence of a more detailed analysis, we make the assumption that the historical experiences of banking crisis are the main quantitative element that can be used to get close to the eventual negative impact — via the financial effects — of a break-up of the euro zone.

Laeven and Valencia (2012) analysed 147 banking crises in developed and emerging countries over the last few decades (1970-2011). They calculated the losses in production as the three-year cumulative loss of actual GDP relative to trend GDP [7]. For the developed countries, the cumulative loss of growth was on average 33 GDP points. During these three crisis years, the public debt increased on average by 21 GDP points (partly due to bank recapitalizations), the central bank's balance sheet increased by 8 GDP points, and the level of nonperforming loans increased by 4 percentage points. It should be noted that there was a high degree of heterogeneity in the cost of the crises, depending on the crisis and country in question. For example, the authors' assessment of the cost of the 2008 banking crisis in terms of growth following the bankruptcy of Lehman Brothers was 31 GDP points for the United States and 23 GDP points for the euro zone as a whole. Hoggarth, Reis and Saporta (2002) conducted a similar study and sought to provide robust assessments of trend GDP. They noted cumulative production losses during crisis periods ranging from 13 to 20 GDP points, depending on the indicator chosen. However, these estimates of the cost of banking crises are to be taken with caution, since they are based on numerous

assumptions, in particular on the trajectories that countries would have followed in the absence of a crisis.

IV – The gains from monetary autonomy

The gains from an alternative monetary policy would depend on the new direction taken by a monetary policy that remains to be defined and that will determine the conditions for financing the economy. Such a policy would probably be ultraaccommodative due to the financial and banking instability generated by the balance sheet effects.

Evaluations of the contribution of financial conditions in France from 2014 to 2018, however, suggest that these are not the most important factor explaining the sluggishness of economic activity. Over this period, the contribution of financial and monetary conditions to GDP growth is between -0.1 and 0.2 points [8]. There is thus little gain to be expected from a new ultra-accommodative monetary policy (independently of the effects on exchange rates discussed in the first section or the impact of external pressure).

Conclusion

This text has attempted to outline the possible consequences of a Frexit, without going into too detailed and therefore perilous quantification.

- Contrary to what is sometimes advanced, there is little to be expected in terms of competitiveness or manoeuvring room for short-term monetary policy;
- The main cost would come from the banking or financial crisis arising from balance sheet effects, particularly given the context of a disorderly exit.

At this stage of the analysis, it is difficult to identify the potential positive economic effects of a Frexit, while the risks of a negative impact due to financial effects seem to be very significant.

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[1] These points are to a large extent discussed in *Capital Economics* (2012).

[2] It is difficult to develop a long-term counterfactual scenario in the case of exiting the euro. We therefore focus on the short- and medium-term effects of possible transitions.

[3] We implicitly eliminate the scenario of a currency war where each country would try to gain competitiveness by devaluations that would permanently lead us away from convergence towards a real equilibrium exchange rate.

[4] The introduction of tariffs like this calls for leaving the European Union. Without developing this analysis here, it is very likely that leaving the euro zone would lead to leaving the European Union. There have been assessments of the EU's contribution to intra-European trade and growth that we are not using here in our short-term approach.

[5] Through its quantitative easing program, the ECB essentially purchases sovereign debt bonds, including French debt securities. In February 2017, the outstanding securities held by the ECB under this programme (PSPP) amounted to \notin 1,457.6 billion. Breaking down the purchases based on the share of the ECB's capital subscribed by the central banks of the member states, the fraction of French debt securities exceeds 200 billion euros.

[6] Getting free from the constraints of the Stability and Growth Pact could be a gain in itself. This assumes that the constraints of the SGP go beyond simply the sustainability of the public debt demand.

[7] These evaluations show, however, that there is a high degree of heterogeneity in the assessed costs depending on the country in question.

[8] https://www.ofce.sciences-po.fr/pdf/documents/prev/prev101 6/france.pdf