

# The Real Effects of a Euro Exit

## *Lessons from the Past*

Riccardo Realfonzo and Angelantonio Viscione

*Abstract:* In the debate between supporters and critics of the euro, the opposing ideological extremes have gotten it wrong. The most important lesson we can learn from the experience of the past is that the outcome, in terms of growth, distribution, and employment, depends on how a country remains in the euro; or, in the case of a euro exit, on the quality of the economic policies that are put in place once the country regains control of monetary and fiscal matters, and not on the fact of abandoning the previous exchange system. At the same time, historical experience suggests that countries with higher per capita income and more stable political institutions would be more likely to benefit from a euro exit.

**Keywords** currency crisis; devaluation; employment; euro exit; Eurozone; growth; history; wages

The Eurozone has shown no growth since 2007 and the processes of divergence between central and peripheral countries have become more and more widespread.<sup>1</sup> As the “Economists’ Warning” of 2013 made clear, if the economic policies of austerity imposed by treaties stay in place, it will only be a matter of time before another Eurozone crisis occurs.<sup>2</sup> Meanwhile, the continued participation of the peripheral countries in the euro, within the overarching framework of restrictive policies, produces dramatic social and economic effects, as the Greek experience shows. The Italian case is also telling: despite the process of reforms under way, Italy is witnessing a slow decline, with widespread unemployment, increasingly unequal income distribution, and the downsizing of the welfare state. There is no doubt that the best option would be to change the direction of European policies. But this solution is politically more and more improbable, since Germany and its satellite states continue to reject any movement in this direction. We therefore have to ask ourselves what the consequences of an exit from the euro might be. This article attempts to clarify the possible effects of a single country’s abandoning the euro, on the basis of past experience.

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## THE EURO AND THE GREAT CURRENCY CRISES OF THE PAST: METHOD OF ANALYSIS

It is not easy to foresee the scenarios following a crisis of the euro. This is also because a great deal depends on the fact that the euro exit might involve more than one country and the economic and political clout of these countries would have great relevance. Furthermore, things could differ significantly depending on whether or not the exits were coordinated and whether or not they led to one or more exchange agreements. Needless to say, in the meantime we are groping in the dark about the whole issue.

We can, however, take a few steps forward, as long as we avoid the pitfalls associated with the opposing ideological extremes. We need to avoid falling into the pessimistic irrationalism of the supporters of the euro at all costs as well as the naive idea that the euro is the root of all evil, which sees an exit from the Eurozone as the remedy for all ills.<sup>3</sup>

Staying firmly within the field of scientific approaches, some economists are working on complex forecasting models. But such models have, in the past, often proved limited due to the “heroic” hypotheses underlying them. After all, economic theory provides no univocal answers. In fact, the foundations of economic theory teach us that a country leaving the euro and returning to its original currency, with an initial one-to-one exchange rate, will immediately encounter a loss of value for the reinstated currency, which will then become cheaper than the other currencies. This should favor the country’s exports and restrict its imports, improving the trade balance, driving growth, and promoting employment. However, the degree to which growth is actually increased by devaluations and the abandoning of exchange agreements is an endlessly debated question. Devaluation increases the cost of imported goods and this tends to push up domestic price levels (and therefore the price of exports), reducing the competitive advantage.<sup>4</sup> To complicate matters, devaluation has redistributive effects, which are also hotly debated. The rise in the general domestic price level that tends to follow devaluation, for instance, tends to reduce the purchasing power of money wages. The reduction of real wages (in the presence of mechanisms adjusting wages to prices or trade union reactions) can generate pressure to drive up money wages and this could accentuate the inflation, further eroding the anticipated competitive advantage resulting from devaluation. Furthermore, a fall in the wage share of gross domestic product (GDP) can cause a drop in the internal demand for consumer goods and this would tend to reduce growth,<sup>5</sup> not to mention the potential effects on the cost of the public debt and on the bankruptcy risk for those with high levels of foreign debt, the cost of which obviously balloons with devaluation.

Going beyond theoretical disputes, and in view of the intrinsic weakness of forecasting models, this study examines the historical information available to us. Although the exit from a monetary union such as the Eurozone would be unprecedented, some important indications can be found in the currency crises of the past that more closely resemble the present case.

For this purpose, we will examine the currency crises that in recent history have entailed large devaluations of the exchange rate and that were accompanied by the abandoning of previous agreements or exchange systems.<sup>6</sup> This allows us to take into account both the phenomenon of devaluation and the political-institutional changes that follow when exchange regimes are abandoned.<sup>7</sup> Concentrating on currency crises after 1980, there are twenty-eight cases of large devaluations—greater than 25 percent against the dollar<sup>8</sup>—that involved abandoning the previous exchange systems.<sup>9</sup> Of these, seven cases involved countries with high per capita

income: Australia (1985), Finland (1993), Iceland (1985), Italy (1993), South Korea (1998), Spain (1983), and Sweden (1993); and twenty-one cases involved countries of low per capita income: Argentina (2002), Belarus (1999), Brazil (1999), Chile (1982), Costa Rica (1981 and 1991), Egypt (2003), Guatemala (1990), Honduras (1990), Indonesia (1998), Kazakhstan (1999), Mexico (1995), Paraguay (1989), Peru (1988), Poland (1990), Romania (1990), South Africa (1984), Suriname (1994), Turkey (1999), and Uruguay (1982 and 2002).

In light of the descriptive statistics given below, let us see what can be learned from the past experience of major currency crises followed by large devaluations and the related abandonment of the previous exchange systems. Our focus is on the real effects of currency crises. For this reason, we will not dwell on a description of financial and money market turbulence, and—after analyzing the inflationary effects—we will concentrate on the overall effects in terms of commercial balance, growth, employment, and real wages.

## INFLATION PROGRESSIVELY ERODES THE ADVANTAGE OF DEVALUATIONS

The first thing to examine is the extent to which currency crises tend to trigger inflationary processes and how much the latter can annul the positive effects of devaluation. To continue the analysis, we will look at the fall against the dollar in our twenty-eight cases and then the differential between inflation in the United States and in each of these countries.

In the historical experience that we are considering, there was an average fall against the dollar of 558 percent, which means that the currency crises led to a depreciation of the currency involved in the crisis of five and a half times compared to the dollar (Table 1). But the focus should be mainly on what happened in high-income countries, which are clearly more relevant to our case, also because of the significant difference from the dynamics of low-income countries. In fact, the currency depreciation in the high-income countries was around 32 percent. For instance, in 1993 the Italian lira fell by 27.69 percent against the dollar.<sup>10</sup>

TABLE 1  
Devaluations and Inflation Differentials in the Twenty-Eight Cases of Currency Crisis (1980–2013)

<i>Country and year of crisis</i>	<i>Fall against the dollar, %</i>	<i>Inflation differential compared to United States</i>		
		<i>Crisis year</i>	<i>Crisis year and following year</i>	<i>Crisis year and following two years</i>
All countries	558.51	57.56	237.84	447.45
High-income countries	31.91	6.14	10.92	15.65
Australia (1985)	25.66	1.42	6.06	10.76
Finland (1993)	27.52	-0.46	-0.95	1.49
Iceland (1985)	30.96	28.89	51.46	68.85
Italy (1993)	27.69	1.51	2.92	5.76
Republic of Korea (1998)	47.32	3.87	1.40	0.08
Spain (1983)	30.56	7.94	15.25	20.65
Sweden (1993)	33.65	-0.17	0.33	1.96
Low-income countries	734.04	75.56	317.27	598.58

Source: Authors' calculations based on World Bank data.

But what counts more is the difference in the responsiveness of inflation, which is described in the literature using the exchange rate pass-through coefficient. In fact, as past experience confirms, devaluations often give rise to significant inflationary processes. Suffice it to say that, in the currency crisis year, the inflation differential recorded is overall about 58 percent compared to the United States (see Table 1) and, within just two years, the inflation differential is around 450 percent, thus wiping out 80 percent of the competitive benefit derived from devaluation. However, in this case, too, there is a significant difference between the experience of high- and low-income countries. In fact, in high-income countries, the inflation differential is 6 percent in the first year and does not reach 16 percent after three years. This therefore confirms that devaluations tend to trigger significant inflationary processes, which, however, are milder in high-income countries, where within two years of the crisis, inflation erodes the devaluation effect by nearly 50 percent.<sup>11</sup>

But rigid rules cannot be set. In fact, by looking at specific high-income countries, it can be seen that the cases are heterogeneous. Indeed, in some countries, despite a fall of more than 25 percent against the dollar, there is no significant difference in inflation compared to the United States (e.g., Finland, Korea, and Sweden); in other cases, the inflationary spurt is limited (e.g., in 1993 in Italy, where, after three years, the cumulative inflation was only 5.7 percent); yet in others, it is quite marked (e.g., Australia, Spain, and, above all, little Iceland, the only high-income country in which after three years the inflation differential was higher than the devaluation).<sup>12</sup>

## IMPROVED TRADE BALANCE IN HIGH-INCOME COUNTRIES

It is therefore to be expected that the first positive effect of abandoning the euro would concern the improvement of the trade balance, linked to export growth and the tendency to import less.

TABLE 2  
Trade Balance: Average Net Exports as a Percentage of GDP in the Two and Three Years  
Prior to and Following the Crisis (1980–2013)

<i>Country and year of crisis</i>	<i>Fall against the dollar, %</i>	<i>Average net exports as % of GDP</i>			
		<i>2 years prior</i>	<i>2 years post</i>	<i>3 years prior</i>	<i>3 years post</i>
All countries	558.51	-0.04	0.99	0.20	0.85
High-income countries	31.91	-0.33	3.07	-0.69	3.02
Australia (1985)	25.66	-1.77	-2.37	-1.87	-1.81
Finland (1993)	27.52	-0.05	5.12	-0.55	5.90
Iceland (1985)	30.96	1.05	1.97	-0.83	0.98
Italy (1993)	27.69	0.14	3.21	0.17	3.36
Republic of Korea(1998)	47.32	-1.65	9.31	-1.28	7.16
Spain (1983)	30.56	-1.88	0.55	-2.00	0.92
Sweden (1993)	33.65	1.88	3.71	1.53	4.60
Low-income countries	734.04	0.06	0.26	0.51	0.09

Source: Authors' calculations based on Ameco data—European Commission and World Bank data.

To get a clearer idea, we return to our historical cases to make a comparison between the average of the trade balance (exports minus imports) against GDP in the two and three years prior to and following the currency crisis. In fact, as shown in Table 2, the low-income countries did not benefit greatly from the devaluations, considering that the trade balances change very little on average. The situation is quite different in high-income countries, where currency crises evidently do not have the disastrous effects (also on institutional and political aspects) experienced in low-income countries. In fact, in high-income countries the trade balance improves considerably, on average by more than three points of GDP, with reference to the two-year and three-year periods.<sup>13</sup> With only one exception (Australia 1985), the trade balance improves immediately after the devaluations.

### EXPORTS DRIVE GROWTH IN SOME HIGH-INCOME COUNTRIES

The improvements in the commercial balance that would follow a euro exit could have a positive effect on growth. At least this is what the historical analysis tends to show, once we compare the average growth rate recorded in the two and three years prior to the crisis with that of the two and three postcrisis years.

Actually, in the set of twenty-eight cases considered as a whole, the results were not positive. However, by separating the high-income countries from the low-income ones, we again find very different outcomes (Table 3). In fact, unlike what happens in low-income countries, the high-income countries show an appreciable increase in their average growth rate, passing from 1.2 percent in the two years prior to the devaluation to 2.2 percent in the two post-devaluation years. An even more marked acceleration of growth is found in the three-year period prior to and after devaluation, when growth passes on average from 1.4 percent to 3.2 percent. Overall, therefore, high-income countries, driven by the trade balance (which did not improve in their low-income counterparts), significantly increased their rhythms of growth.

TABLE 3  
GDP Growth Rate: Average Figures in the Two and Three Years Prior to and Following the Crisis (1980–2013)

<i>Country and year of crisis</i>	<i>Fall against the dollar, %</i>	<i>Average growth rate of GDP</i>			
		<i>2 years prior</i>	<i>2 years post</i>	<i>3 years prior</i>	<i>3 years post</i>
All countries	558.51	2.43	0.08	2.72	1.27
High-income countries	31.91	1.20	2.22	1.45	3.21
Australia (1985)	25.66	4.94	3.19	2.55	3.99
Finland (1993)	27.52	-4.62	1.60	-2.85	2.47
Iceland (1985)	30.96	0.99	4.78	1.38	6.04
Italy (1993)	27.69	1.19	0.65	1.48	1.40
Spain (1983)	30.56	0.56	1.78	0.80	1.96
Sweden (1993)	33.65	-1.15	1.01	-0.52	2.02
Low-income countries	734.04	2.86	-0.67	3.17	0.59

Source: Authors' calculations based on data from Ameco—European Commission, World Bank.

But on this point, past experience cautions prudence in assessments. In fact, it should be pointed out that not all high-income countries recorded increased growth rates. Among these was Italy, despite the fact that after devaluation its trade balance rose by more than three percentage points of GDP.

## EMPLOYMENT OFTEN DOES NOT GROW

While these signs are, in some respects, positive for competitiveness, trade balance, and growth, the effects on employment are not very comforting.

Taking the set of twenty-eight past cases as a whole, it can be seen that after the currency crisis, the unemployment rate decreased gradually, falling on average by 1 percentage point within three years after the outbreak of the currency crisis (Table 4). However, the drop in joblessness on average involves only low-income countries. In fact, in high-income countries the unemployment rate is perfectly stationary.<sup>14</sup> In the experience of some countries (e.g., Italy), the unemployment rate even grew significantly. It is therefore clear that in the past, in high-income countries after currency crises, growth was guaranteed by more intensive use of labor and industrial capital. Nevertheless, in this respect, too, there are significant differences among the high-income countries, suggesting that the different labor market situations (institutional and normative) and the different economic policies in place had a major influence on the employment effects.

TABLE 4

Joblessness After the Currency Crisis: Unemployment Rate in the Years Following the Crisis (1980–2013)

<i>Country and year of crisis</i>	<i>Fall against the dollar, %</i>	<i>Unemployment rate</i>		
		<i>Crisis year</i>	<i>First year postcrisis</i>	<i>Second year postcrisis</i>
All countries	558.51	9.74	9.38	8.91
High-income countries	31.91	9.46	9.83	9.46
Australia (1985)	25.66	8.26	8.08	8.11
Finland (1993)	27.52	16.30	16.60	15.40
Iceland (1985)	30.96	1.60	1.10	0.80
Republic of Korea (1998)	47.32	6.95	6.34	4.14
Spain (1983)	30.56	14.30	16.70	17.80
Sweden (1993)	33.65	9.10	9.40	8.80
Low-income countries	734.04	9.86	9.19	8.67

Source: Ameco—European Commission, World Bank, Eclac CepalStat.

## THE DANGER OF WAGE DEFLATION

To understand what might hinder an employment upswing immediately after an exit from the euro, even though the commercial balance is tending to improve, we need to examine what might happen on the wage front.

Here lies the major concern that emerges from this analysis. In fact, past experience shows without a shadow of doubt that the devaluation following a currency crisis can have

particularly serious effects on wages. To verify these conclusions, let us consider both real wages (i.e., the purchasing power of workers' average money wages) and the wage share, which shows the percentage of GDP that goes to those receiving wages for labor. As Table 5 shows, in the first three years after devaluation in the twenty-eight cases considered, on average there is a drastic drop in real wages and in the wage share, which seems to be mainly due to inflationary processes that generate a redistribution from wages to profits and rent.

Naturally, once again it is useful to separate the high-income countries from the others. Now the effect is serious even if we consider only the high-income countries, in which—with the exception of Iceland (where there was a sharp rise in real wages)—it is seen that real wages, after three years, are still lower than the level recorded in the year of the currency crisis. Especially in high-income countries, the wage share falls by 7.8 percent in just three years, with a sudden massive redistribution effect at the expense of workers. It is easy to deduce that the drop in wages contributed to keeping the internal demand for consumer goods low, to the detriment of the more traditional sectors, and this acted as a significant brake on renewed employment growth.

In this regard, it might be useful to recall the Italian case. As we know, after the 1993 currency crisis, restrictive wage policies were put in place. This evidently limited the inflationary tendency and therefore allowed exports to continue to grow, but after three years caused a drop of more than 4 percent in wages and a collapse of the wage share of nearly 9 percent. This explains the decline in domestic demand and our country's failure to grow in those years, as well as the rise in joblessness. In other words, in light of the data on the growth of the trade balance and the fall in real wages, it is clear that in Italy the increase in foreign demand was substantially compensated by the stagnation of domestic demand with no effect on growth. These were the overall outcomes of the wage restriction policies of the time.

TABLE 5  
Real Wages and Wage Share as a Percentage of GDP: Cumulative Figures in the  
Three Years Following the Currency Crisis (1984–2013)

<i>Country and year of crisis</i>	<i>Fall against the dollar, %</i>	<i>Change in real wages, %</i>			<i>Change in wage share on GDP, %</i>		
		<i>Crisis year</i>	<i>Crisis year and following year</i>	<i>Crisis year and following two years</i>	<i>Crisis year</i>	<i>Crisis year and following year</i>	<i>Crisis year and following two years</i>
All countries	558.51	-8.23	-18.94	-18.25	-4.99	-11.73	-12.16
High-income countries	31.91	-0.34	0.98	4.10	-0.67	-3.22	-3.79
Australia (1985)	25.66	-0.87	-2.98	-3.47	-0.65	-1.43	-4.98
Finland (1993)	27.52	-3.42	-0.40	2.83	-6.48	-9.70	-12.25
Iceland (1985)	30.96	5.63	12.21	32.62	7.24	7.10	20.01
Italy (1993)	27.69	-0.78	-2.40	-4.08	-1.80	-5.12	-8.60
Republic of Korea (1998)	47.32	-1.94	-1.66	-1.96	-1.08	-5.33	-6.62
Spain (1983)	30.56	1.42	1.25	2.23	-0.39	-4.85	-7.66
Sweden (1993)	33.65	-2.41	0.82	0.50	-1.55	-3.22	-6.45
Low-income countries	734.04	-10.99	-25.91	-26.07	-6.58	-14.86	-15.25

Source: Authors' elaboration of World Bank data.

The descriptive statistical analysis, therefore, shows that the devaluations that follow currency crises with alterations in the exchange regime are normally followed by a contraction of real wages and an even more marked contraction of the wage share. These conclusions are also confirmed by some linear regressions that we conducted between the size of the devaluation and the percentage changes in real wages and in the wage share.<sup>15</sup>

## DEVALUATIONS, INCOME LEVEL, AND STABILITY OF POLITICAL INSTITUTIONS

In the previous sections, we have concentrated on analyzing the real effects of large devaluations after exchange regimes were abandoned in the post-1980 period. It emerges that high-income countries generally managed to take advantage of these situations to improve their trade balance and increase their growth rates whereas low-income countries did not benefit, often seeing reductions in the economy's growth rate. Leaving out from this study the question of the nature of economic policies that were implemented in the twenty-eight cases, we argue that the significant differences in the effect of devaluations between high- and low-income countries depend essentially on the fact that the high-income countries demonstrated stability in their political institutions (compared to the low-income countries), and this contributes to the reduction of the intensity of speculative attacks and of the general financial tensions caused by the currency crises, and also enables them to introduce effective economic policies. In contrast, the effect of financial meltdowns on low-income countries generally produced profound upheavals in the political institutions, which in the end prevented these states from taking advantage of the large devaluations.<sup>16</sup>

To confirm this hypothesis, let us briefly recall some of the events that accompanied the currency crises in question.

The story of the currency crises in the ex-Soviet republics confirms these conclusions. For example, think of Romania and Poland, which in 1990 were going through a period of radical transition from a centrally planned economy to a market economy. The two countries underwent major devaluations, of 560.10 percent and 50.33 percent, respectively, but this did not improve the external accounts. Over three years the commercial balance actually worsened, especially in Romania (from 67.09 percent to - 6.84 percent) but also in Poland (from 3.03 percent to 2.05 percent).

The story was different for the other ex-Soviet republics in our sample, Belarus and Kazakhstan, which experienced a currency crisis in 1999, in a less turbulent political context. Both economies had strong ties with Russia when it was hit by a profound crisis in 1998. The devaluation of 440 percent in Belarus contributed to the acceleration of inflation up to almost 350 percent in 1999, eroding much of the competitiveness acquired, but the economic policies put in place, in the form of reforms designed for the transition and an active protectionist industrial policy, helped the country to improve its external accounts and its growth (Fischer and Sahay 2000: 18–19). Kazakhstan, dependent on Russia for almost 50 percent of its total trade, was hard hit by the 1998 devaluation of the ruble, which allowed Russian goods to aggressively penetrate the domestic market. This made the local authorities decide to adopt a more flexible exchange regime in 1999 and, at the same time, to introduce temporary controls on movements of goods and capital. These measures gave an injection of confidence and enabled Kazakhstan to improve its trade balance and return to growth (Kasera 2007). Years after the collapse of the Soviet Union, in a more stable political climate, it was therefore possible for these countries to



make the best use of the competitive advantage of passing from a tighter exchange regime to a more flexible one.

Turkey too suffered the effects of the 1998 Russian crisis due to its close commercial ties with the area and, despite a 60 percent devaluation of the lira in 1999, saw a worsening of its commercial balance, which fell from 1.16 percent of GDP in 1998 to 0.15 percent in 1999, worsening also on a two-year basis (from 0.36 to  $-1.42$ ) and a five-year basis (from 0.66 to 0.37). According to the OECD, among the various factors affecting the loss of confidence and the flight of considerable amounts of capital in this period there were domestic factors including political instability (OECD 2000: 34–38). Turkey, in fact, was coming out of a politically turbulent decade during which in 1995 Necmettin Erbakan was elected prime minister and, after only two years, was forced to resign by the military forces with a memorandum, in what was called a “postmodern coup d’état.”

Shifting our attention to a totally different geopolitical context, the 1988 currency crisis in Peru also occurred in a decade that was extremely politically and economically turbulent for the country, and its trade balance underwent a deterioration in spite of the devaluation. Having returned to democracy only in 1980, Peru was hit two years later by a profound economic crisis caused in part by the drop in prices for key exports such as copper and oil (Paxson and Schady 2004: 3–4). In 1985, the direction of Peru’s economic policy changed radically with the election of the heterodox Alan García, but after two years of solid growth it plummeted into another profound recession in 1988, the year the government tried to react with a sharp devaluation and ill-conceived economic measures, such as a 4 percent tax on exports and an ineffective and disjointed freeze on industrial prices. Due to bad management of the price freeze, inflation in 1989 was more than five times the value of the devaluation of the previous year and more than seven times that of 1990, the year Peru yet again changed its government and the direction of its economic policy (Pastor and Wise 1992).

As we have said, in the past, high-income countries have been more successful in grasping the possible advantages of devaluations following crises in the exchange regime. The partial exception that confirms the rule was what happened in Australia in 1985. According to Ameco data, average net exports as a percentage of Australian GDP in the two years 1985–86 was worse than the previous two years:  $-2.37$  percent compared to  $-1.77$  percent. There was, however, a slight improvement over time, since in the three-year period 1985–87, the current account balance was essentially unchanged compared to the three years prior to devaluation ( $-1.87$  percent of GDP and  $-1.81$  percent of GDP, respectively). One of the factors that can explain Australia’s anomalous performance is the commodities price trend. The price movement of raw materials had always corresponded to the country’s terms of trade and when in 1985 they suffered a sharp fall they could not avoid having negative effects on the Australian current account deficit (Blundell-Wignall, Fahrner, and Heath 1993: 40). As we have already said, an improvement in the trade balance does not necessarily entail an improvement in the GDP growth rate. To remain in the field of high-income countries, this is what happened in the Republic of Korea in 1998 and in Italy in 1993, where in both cases the political institutions played a role during the currency crisis. Korea, for instance, is classified among the episodes in which the democratic transition and presidential elections had negative effects on the credit market (Kohlscheen 2004: 2). In Italy, it was the period of the “clean hands” judicial investigation, which involved most of the political class of the time and led to the end of the so-called First Republic.

Returning to the possible effects of leaving the Eurozone, the lesson from history is therefore that a country or a region undergoing turmoil in its political institutions, with weak international relations or vulnerable to speculative attacks due to public finance factors, especially in the presence of high foreign debt, might not be the best candidate for abandoning the currency area. Any exit from the European Monetary Union should, therefore, also be assessed in terms of the possibility of implementing expansive economic policies and managing the transition in a favorable political climate.

## CONCLUSIONS

The Eurozone crisis can mean the single or multiple exits—autonomous or by agreement—of small and larger countries, and may or may not lead to new exchange rate agreements. Naturally, there is no economic theory or historical experience that can cast a definitive light on the possible scenarios that the various combinations of these options would cause. At the same time, past experience tells us that for a peripheral country abandoning the Eurozone could trigger renewed growth. But euro exit is not a cure-all.

It is obvious that abandoning the euro could increase the competitiveness of the country in question, especially in the short- to medium term; then little by little, inflation would erode the competitive advantage of the exchange rate. At the same time, improvements in the country's trade balance could foster growth, but it would be harder for employment to grow. A lot would depend on the situation of the labor market—that is, the wage policies and the institutions of wage bargaining—and more generally the economic policies in place. In cases where wages were somehow protected from inflation, the domestic demand might not lose much impetus and this could sustain growth and employment.

In contrast, in cases where wages were not protected, the economy would be powered more by exports, but the home market might suffer considerably, as would employment, which relies on traditional sectors that fulfill the internal demand. In this case, the increased exports would generate higher profits, with the risk of not seeing any expansion of employment levels. At the same time, a devaluation accompanied by policies of wage support and incisive industrial policies could sustain internal demand and create the conditions for a structural growth of competitiveness.

In short, unless there is a change toward greater flexibility and redistribution in European policies with an end to austerity, abandoning the euro could be the solution chosen by some countries in the not-too-distant future, and this could give those economies a chance to revive. In any case, a return to monetary sovereignty and the exchange rate is not enough to cancel, as if by magic, the problems caused by the inadequacy of the production system or the low standard of material and immaterial infrastructures. Furthermore, leaving the euro might benefit high-income countries with greater political stability, which can implement expansionary policies more suited to relaunching growth. For smaller, more unstable countries, the real effects of abandoning the euro seem uncertain and far less rosy in the light of past experience. The most important lesson we can learn from the experience of the past is that the outcomes in terms of growth, distribution, and employment depend on how a country remains in the euro and—rather than on abandoning the old exchange system as such—on the quality of the economic policies that are put in place once the country regains control of monetary and fiscal matters.

## NOTES

1. For more, see Arestis and Sawyer (2011), Realfonzo and Viscione (2014).
2. This is the prediction in “The Economists’ Warning,” published in 2013 by the *Financial Times* (Brancaccio and Realfonzo 2013). The list of first signatories of “The Economists’ Warning” included Philip Arestis, Wendy Carlin, James Galbraith, Mauro Gallegati, Eckhard Hein, Alan Kirman, Jan Kregel, Heinz Kurz, Theodore Mariolis, Alfonso Palacio-Vera, Dimitri Papadimitriou, Pascal Petit, Dani Rodrik, Malcolm Sawyer, Willi Semmler, Engelbert Stockhammer, and Tony Thirlwall.
3. For bibliographic references, see Heise (2014).
4. To quantify these effects, the literature uses the coefficient of exchange rate pass-through, which indicates the percentage change in the price level expressed in local currency for the goods imported due to a 1 percent change in the exchange rate (Goldberg and Knetter 1997). Scientific research on this topic suggests that the effects of devaluation are heterogeneous. The tests carried out by Barhoumi (2006) on twenty-four developing countries from 1980 to 2003, for instance, lead the author to reject the idea of a homogeneous pass-through over the long term. As far as advanced countries are concerned, some studies record a sharp decline in the transmission coefficient for goods imported to the United States, from over 0.5 in the 1980s to about 0.2 in the 1990s (Marazzi, Shiratsuka, and Shirota 2005) and similar conclusions are reached in other research on the price of imports net of raw materials in Japan (Otani, Shiratsuka, and Shirota 2005). Other studies, such as that of Campa and Goldberg (2006), challenge these arguments and maintain that in the member countries of the Organization for Economic Cooperation and Development (OECD), the pass-through is tending to increase.
5. An income distribution to the detriment of wage earners can have a negative impact on economic growth, since workers have a higher propensity to consume than those who receive profits and rents, and therefore the demand for consumer goods can only fall. That is why various papers of Keynesian inspiration give a central role to the redistributive effects of devaluations and show that they can determine lengthy contractions in production (Alexander 1952; Diaz Alejandro 1963; Krugman and Taylor 1978). The literature on this, however, is very heterogeneous. In general, among the more recent studies warning about the possible restrictive effects of devaluations, for instance, are those conducted on some advanced countries by Hein and Vogel (2008) and the econometric model tested on advanced and developing countries by Lian, Kun, and Ren (2014). It is sufficient to think of Eichengreen and Sachs (1985) who, studying the devaluations of the 1930s, reject the common argument that these had a marginal role, if any, in stimulating economic growth at that time. On the contrary, they argue that if policies of that kind had been more courageously adopted, recovery from the Great Depression would have been faster. More recently, Rodrick (2008) and Di Nino, Eichengreen, and Sbracia (2014) have reached similar conclusions, arguing that devaluations generally foster expansion in the economy.
6. This approach is suggested by Brancaccio and Garbellini (2014). We have already examined this approach in Realfonzo and Viscione (2015).
7. Naturally, for the main Eurozone members, what has happened in the past in high-income countries is particularly significant. However, the experience of low-income countries cannot be overlooked, considering that these countries saw considerable political-institutional changes in the aftermath of the currency crises, and this could also happen to the European countries themselves if one or more exits from the euro trigger a chain reaction all over the Eurozone.
8. This is the threshold generally used as a reference point in the literature (see Frankel and Rose 1995).
9. Refer to the International Monetary Fund (IMF) classification of exchange rate regimes, <http://www.imf.org/external/np/mfd/er/2006/eng/0706.htm>.
10. In contrast, low-income countries lost over 700 percent in value; this figure drops to around 150 percent if we exclude Suriname’s maxi-devaluation in 1994. In view of the presence of some “anomalous” figures, an alternative procedure is to analyze the median, which gives the central value in the distribution either in growing or diminishing order. In our case, the median devaluation of the whole sample is 54.47. This becomes 30.56 for high-income countries and 60.62 for low-income countries.
11. The analysis of the median relative to the inflation differential in the first year for the whole sample shows a figure of 11.96, confirming the marked difference between the two blocks of countries (the median of high-income countries is just 1.51). This is confirmed after three years (when the median inflation differential of all the countries with the United States is 47.02, while for high-income countries, it is 5.76). The conclusions about the pass-through of the whole sample are therefore substantially in-line with those emerging from the analysis of the averages. Therefore,

in Table 1 and the following tables, averages will be used, since the various dispersion indexes confirm the main findings of this study.

12. It is interesting to see that in high-income countries, five years after the currency crisis, the inflation differential on average erodes 78 percent of the devaluation.

13. A similar conclusion is reached by considering the average net export as a percentage of GDP in the five years prior to the currency crisis and the five years after the crisis. And this shows that in high-income countries the positive effects of devaluation tend to persist in the medium period.

14. The analysis of the median in this case shows that in the span of three years the unemployment rate would fall slightly, by 0.3 percent. The difference from the analysis of the averages is however utterly minimal, considering that in the following year, that is, in the fourth year after the currency crisis, the unemployment rate was higher than in the crisis year.

15. According to regression analysis, the argument that as devaluation increases, both real wages and the wage share of GDP decline, has a high likelihood of being significant (for instance, by regressing the cumulative percentage change in real wages over the three years after devaluation, we get an  $R^2$  of 0.57 with a far lower  $p$ -value of 0.05 (excluding from the analysis both the missing figure for Romania and the anomalous figure for Suriname). Again, by regressing the cumulative percentage change in wage share over the three years, we get an  $R^2$  of 0.59 with a  $p$ -value of 0.00001 (excluding the missing data for Costa Rica [1991] and Peru, as well as the anomalous figures for Suriname and Poland).

16. This approach is confirmed in the literature, which shows the relation between political instability and financial market trends and also between political instability and sovereign debt crises (Bussiere and Mulder 1999; Manasse, Roubini and Schimmelpennig 2003; Moser 2007; Van Rijckeghem and Weder 2004). The concept of “political instability” “is generally defined as the propensity of an imminent government change, either by constitutional (new elections or cabinet crises) or unconstitutional means (coups d’état or revolutions)” (Moser 2007: 5).

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