SOCIAL PACTS AND MACROECONOMIC ADJUSTMENT:

THE RELATIONSHIP BETWEEN FISCAL ADJUSTMENT AND EXCHANGE RATE MOVEMENTS, AND WHAT IT MEANS FOR EMU

APRIL 2009

Benedicta Marzinotto
University of Udine
Via Tomadini 30/A
33100 Udine, ITALY

PREPARED FOR THE BIENNIAL EUSA CONFERENCE, MARINA DEL REY, LA, APRIL 2009

This is a preliminary draft; please do not quote without permission

Abstract

This paper provides a political economy explanation for the occurrence of fiscal consolidation by looking at the distributional effects of preceding real exchange rate depreciations across and within countries. Existing studies show that successful fiscal consolidation episodes tend to be preceded by downwards exchange rate movements (Giavazzi and Pagano 1990; Hjelm 2002; Lambertini and Tavares 2005). We show that the mechanism through which this happens differs across open and closed economies. In the former, there is a "good-times effect" following depreciation that induces the public to accept fiscal reform in the form of a social pact that contains budgetary provisions, provided it has similar distributional implications. By contrast, in closed economies, real depreciations impact differently on different socio-economic groups. That way, they open up room for a political exchange between competing interests that is likely to lead to a social pact and to fiscal reform, the wider its distributional implications. The argument is tested on a sample of OECD countries over 1987-2009.

Keywords: fiscal adjustment, exchange rate movements, social pacts, EMU.

This paper is concerned with the mechanisms through which downwards movements in the exchange rate contribute to fiscal consolidation. The empirical literature on macroeconomic adjustment found in fact that successful fiscal consolidation episodes tend to be preceded by exchange rate depreciations or devaluations (Giavazzi and Pagano 1990, 1996; Alesina and Perotti 1997; Alesina and Ardagna 1998; Hjelm 2002; Lambertini and Tavares 2005). The explanation that has been provided to account for this relationship is as follows. Real depreciations or devaluations reduce the price of domestic relatively to foreign goods and have thus short-run expansionary effects on output. Export-led economic growth will facilitate consensus formation in favour of macroeconomic adjustment because the public is generally more prone to accept fiscal sacrifices in good times. There are two problems with a similar approach. First, downwards exchange rate movements should improve general economic conditions only in small open economies. By contrast, they are expected to have important distributional effects in large closed economies benefiting owners of tradable goods, whilst hurting owners of non-tradables and consumers of imports, i.e. wage earners. Second, the argument about the contribution of exchange rate movements to consensus formation remains only tentative, as the available literature has been unable to suggest a proxy for social consensus and to provide in turn for an empirical test.

To gain some perspective on these questions, this paper analyses fiscal consolidation episodes in OECD countries from 1987 to 2009. We suggest that the mechanism through which real depreciations contribute to fiscal adjustment differs across open and closed economies. In open economies, a fall in the real effective exchange rate that improves a country's international competitiveness will be associated with better economic conditions across the board and thus with stronger social consensus in favour of corrective fiscal measures, as suggested by the existing literature. As a proxy for social consensus, we use a dummy variable that captures the existence (or lack) of social pacts that contain budgetary provisions. In closed economies, instead, falling real effective exchange rates will impact differently on different socio-economic groups. That way, a

real depreciation is expected to trigger a distributional conflict. If a fiscal stabilization is necessary, that will take place only under the framework of a comprehensive social pact. However, in order to get all the parties involved to agree on a budgetary package, it is crucial that the winners from the real depreciation concede to losers by accepting fiscal correction measures that they would otherwise oppose. Seen this way, real depreciations in closed economies open up room for a political exchange between competing groups, whose impact is likely to be felt, above all, on the composition of fiscal reform. The mechanism described above is similar to the revised war of attrition model suggested by Martinelli and Escorza (2007). Asymmetries in the cost of (imported) inflation following a sharp depreciation reduce the delay of stabilization, and wider distributional implications of the proposed reform plans make conflict over stabilization less likely.

This paper's contribution to the existing literature is threefold. First, the available studies have not taken explicit account of openness failing to recognise that depreciations or devaluations have short-run expansionary effects more in open than in closed economies. We look explicitly at export propensity as a proportion of GDP and test our hypothesis on two sample groups, one consisting of countries with above-average and the other one of countries with below-average export propensity. Second, the above cited literature lacks a description of the actual mechanism that leads socio-economic groups to agree on fiscal consolidation in good times in the case of open economies; but it also fails to account for the fact that socio-economic groups may agree on a fiscal reform package even when the depreciation that precedes it comes with strong distributional effects, as it is likely to be the case in large closed economies. To give account of the process of consensus formation, we consider whether the government and the social partners have come to agree on a social pact that contains tax and/or other budgetary provisions. We thus follow some of the recent literature on industrial relations and macroeconomic adjustment according to which most of the social pacts of the 1990s emerged under pressure to reduce inflation and put public finances in order, even if the standard institutional preconditions to corporatism were missing (Pochet and Fajertag 1997, 2000; Ebbinghaus and Hassel 2000; Hassel 2003; Hancké and Rhodes 2005). Third,

we shall be able to contribute to the debate about the success of fiscal adjustment. Most of the empirical literature defines a fiscal consolidation episode as successful when there is no deterioration in the public deficit or debt level two or three years after the initial correction. We show that, in open economies, successful fiscal adjustments are preceded by exchange rate depreciation and by a social pact that contains budgetary provisions. That might be related to the fact that the even distributional impact of the fiscal plan that has been conceived after depreciation induces voters to confirm the government in power with the consequence that the fiscal programme cannot be reversed. By contrast, in closed economies, where fiscal adjustment is deemed to have strong distributional effects, political conflict reduces the chances that the government in power is re-elected and the fiscal adjustment programme continued. In these cases, good fiscal results will persist only if the measures that have been undertaken either on the revenue or on the expenditure side of the budget contribute to that outcome. Indirectly, this approach might be taken as an explanation as to why social pacts are more likely to emerge and resist in small open than in large closed economies, all else being equal.

This rest of the paper is structured as follows. Section I describes the conceptual model. Section II presents the empirical strategy and the estimation results. Section IIII discusses implications for the success of fiscal adjustment. Section IV reviews two case studies. Section V concludes.

1. The conceptual model

The first hint at the role of exchange rate movements in fiscal adjustment is in Giavazzi and Pagano (1990), where the authors show that fiscal contractions in Denmark (1982-1986) and Ireland (1987-1989) were preceded by real depreciations and associated, arguably for that reason, with non-Keynesian effects. The evidence produced there is limited to two small open economies but subsequent studies have applied the argument to all countries, independently of size and levels of

openness. Hjelm (2002) shows that fiscal contractions that are preceded by a fall in the real effective exchange rate are associated with non-Keynesian macroeconomic outcomes in the sense that they come with positive private consumption responses. Lambertini and Tavares (2005) find that downwards movements in either the nominal or the real effective exchange rate increase the likelihood that the debt reduction following the adjustment is persistent.

The empirical results are robust to the estimation strategy employed and to the sample choice, but explanations for the positive association between real depreciations and persistently good fiscal policy outcomes remain tentative. The available literature has conceived of two possible mechanisms through which this might happen. First, real depreciations have short-run expansionary effects on output and consumption because they reduce the price of domestic relatively to foreign goods. Yet, it seems awkward that, in relatively closed economies, downwards exchange rate movements are sufficient to revert the standard (negative) impact of fiscal contractions on GDP growth, generating so-called non-Keynesian effects. The second mechanism identified by the above-mentioned literature is the fact that export-led economic growth following depreciation contributes to the political feasibility of adjustment, as the public is generally more prone to accept state-imposed retrenchment in favourable demand conditions. Still, this latter explanation lacks a detailed account of the circumstances under which consensus is formed considering also that, in closed economies at least, the growth effects from a real depreciation should be felt by certain socio-economic groups more than by others and that fiscal adjustment itself has important distributional effects depending on its composition.

The hypothesis we develop here is that real depreciations in large closed economies trigger a distributional conflict between owners of tradable goods, on the one hand, and owners of non-tradable goods and wage earners, on the other hand. They thus open up room for a political exchange between competing interests at times when fiscal corrective measures are deemed necessary either because the government perceives the debt level to GDP as unsustainable or because external pressures push in that direction, as it would be the case for the Maastricht

convergence criteria and for IMF stabilization programmes imposed on developing countries. Under this circumstance, the winners from exchange rate depreciation are likely to accept fiscal measures that they would have opposed if movements in the exchange rate had not improved international competitiveness and therewith profit prospects in export-oriented sectors.

The sense of the game that unfolds after a depreciation and prior to a fiscal contraction is similar to the war of attrition model developed in Alesina and Drazen (1991) (henceforth A-D) and then revised in Martinelli and Escorza (2007) (henceforth M-E). The original model is predicated on two key assumptions. First, the government and all other socio-economic actors believe that fiscal discipline is desirable by all standards and that delay in adjustment entails costs in terms of inflation and/or of distortionary taxation that are symmetric across socio-economic groups. Second, society consists of heterogeneous agents implying that, even if they all equally recognise the virtue of fiscal discipline, they cannot agree on the ways to achieve it. We motivate the adoption of the A-D model by reference to fiscal consolidation episodes in Europe over the 1990s. Most EU countries were eager to put public finances in order so as to gain access into the European Monetary Union (EMU) from 1991 to 1997 and were constrained by the Stability Pact's deficit ceiling thereafter. Moreover, anecdotal evidence confirms that much of the debate amongst European interest groups did not concern the virtue of fiscal discipline per se, which all groups indeed recognised, but the ways to achieve it (Marzinotto 2005). Against this background, the main effect of a real depreciation or devaluation is to introduce an asymmetry in the distribution of the costs from (imported) inflation, albeit only in closed economies, thereby turning upside down one of the key assumptions in the A-D model, namely the fact that the cost of inflation for each group is independently drawn from the same distribution. Seen this way, the game that develops in closed economies after exchange rate depreciation and prior to fiscal stabilization is more similar to the M-E model. The thrust of the argument there is that an uneven distribution of inflation costs reduces the delay of adjustment and that the intensity of the political conflict around stabilization is likely to be weaker, the greater the distributional implications of fiscal reform. In a nutshell, we aim to show

that the reasons why downwards exchange rate movements are found to contribute to budget consolidation vary from closed to open economies.

2. Empirical strategy and results

We test our hypotheses on a sample of 20 OECD countries over the period 1987-2009[1]. We refer to an episode of fiscal contraction when the government primary surplus is cut by at least 1.5% of GDP. This is the benchmark value used in many other studies because it is best apt to capture discretionary changes in fiscal policy. Lower values are most likely to pick up cyclically-driven adjustments to the primary deficit. We prefer to use this relatively narrow definition of fiscal adjustment episodes and then account for the impact of business cycles by adding real GDP growth to our extended regression model rather than to rely upfront on cyclically adjusted government balances, whose accuracy has been in fact questioned in recent times.

We can count on 73 fiscal adjustment episodes in our 460-observation sample. So as to evaluate the role of exchange rate movements, we focus on the evolution of the real effective exchange rate (REER). Differently from the nominal effective exchange rate (NEER), this picks up the impact of inflation and the monetary stance. Still, we prefer it over the NEER because ours is an argument about the contribution of exchange rates to improvements in competitiveness and the REER is certainly a more appropriate indicator of international competitiveness than the NEER. We use a panel logit specification to rank the importance in fiscal consolidation episodes of exchange rate movements and of social consensus compared with other control variables and estimate the probability of an adjustment episode using the following equation:

$$FA_{0,1} = \beta_0 + \beta_1 \Delta REER_{it} + \beta_2 \Delta REER_{it-1} + \beta_3 SP_{it} + \beta_4 Debt_{it-1} + \beta_5 \Delta Y_{it} + \beta_6 \Delta X_{it} + \beta_7 \Delta R_{it} + \varepsilon_{it} \qquad (1)$$

[1] The sample includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, United Kingdom and the USA.

where *i* indexes countries and *t* years; $FA_{0,1}$, our dependent variable, is a dummy variable that takes the value 1 if an adjustment has occurred and 0 if it has not. $\Delta REER_t$ is the change in the real effective exchange rate in the current year and $\Delta REER_{t-1}$ in the previous year; we thus account for the role of both contemporaneous and preceding real depreciations. SP_t is a dummy variable that takes value 1 if a tripartite social pact on budgetary measures has been signed in the same year and value 0 if no social pact has been agreed upon; this variable is extrapolated from the recently completed "Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts" (Visser et al. 2008). $Debt_{t-1}$ measures the debt ratio to GDP in the previous year and is added to control for the fact that some countries may decide in favour of a fiscal stabilization against the perception that a fiscal crisis of the state is incumbent. ΔY_t controls for the impact of the business cycle on fiscal policy outcomes. Finally, ΔX_t and ΔR_t simply control for the relative contribution to adjustment of interventions on the expenditure and on the revenue side of the budget, respectively, and ε is a standard error term.

We divide our sample into open and closed economies on the basis of their relative export propensity as a proportion of GDP and run the same panel logit specification for each sample separately. Our starting hypothesis is that downwards changes in the REER increase the probability of adjustment in open economies and that, in the case of closed economies, the related coefficients are either statistically insignificant or small in size. If we denote the coefficients for the open economies sample with a star sign, we can write our first hypothesis as follows:

$$\textit{Hypothesis I: } \beta_2 < \beta_2^* < 0$$

Still, a real depreciation should contribute to consensus formation in favour of macroeconomic adjustment in open as much as in closed economies, even if for different reasons. The second hypothesis we want to test is whether social consensus raises the probability of

adjustment. Yet, in closed economies, given that depreciations come with distributional consequences and that consensus building would stem from intense negotiations over complex policy packages that contain a host of side-payments and compensations, the coefficients on the social-consensus variable should either be more significant or bigger than in open economies. We can write our second hypothesis as follows:

$$\textit{Hypothesis II: } \beta_3^* < \beta_3 > 0$$

Table 1 reports the results for both samples. Model (1) is a simple test of the role of exchange rate developments in macroeconomic stabilization after having controlled for business cycle fluctuations and initial debt levels. The results obtained differ across the two samples. In open economies, the coefficient on preceding real depreciations is significant at the 5% level and negative, thereby indicating that downwards movements in the exchange rate increase the probability of adjustment, as predicted in hypothesis I. Furthermore, real GDP growth confirms highly significant and its positively signed coefficient is a hint at the fact that the public is more prone to accept fiscal sacrifices in good times, once the depreciation occurred in the previous period has started delivering growth for all. By contrast, in closed economies, real depreciations alone are not sufficient to precipitate consensus formation in favour of adjustment. The only contributing factors are real GDP growth and in particular initial debt levels, which are likely to represent a threat to the sustainability of the state more in large (closed) than in small (open) economies.

Model (2) introduces our proxy for social consensus. The results obtained are extremely interesting. In open economies, the emergence of a social pact significantly contributes to the probability of fiscal reform; at the same time, that some relationship exists between movements in the exchange rate and the emergence of a social pact is evident from the fact that the size of the coefficient on preceding real depreciations increases to 0.185 from 0.080 in Model (1). Social consensus is but a key determinant of adjustment in closed economies too. Most interestingly, the

emergence of a social pact supports fiscal consolidation efforts more in closed than in open economies because here the striking of a compromise between socio-economic groups that have been differently impacted by depreciation is condition sine qua non to vast consensus building. Real GDP growth confirms statistically significant, but in this case its coefficient is negatively signed, suggesting that bad times and the sense of an incumbent fiscal crisis of the state are stronger triggers of reform in large (closed) than in small (open) economies.

We showed above that social consensus is a key determinant of macroeconomic adjustment in both open and closed economic systems. The reasons behind consensus formation differ however from open to closed economies. We suggest here that the argument presented above has implications also for the composition of fiscal consolidation.

Let us start from a quick sketch of the relationship between movements in the exchange rate, social consensus and the nature of fiscal stabilization measures in the case of small open economies. In small open economies, a substantial depreciation is sufficient to deliver aggregate economic growth facilitating consensus formation, as the public is generally prone to accept fiscal sacrifices in good times. Reinforcing this view is the fact that accounting for the emergence of a social pact that contains fiscal policy measures further enhances the positive contribution of downwards exchange rate movements to the probability of stabilization. Because the depreciation benefits all socio-economic groups on largely equal terms, the composition of adjustment is unlikely to reflect the preferences of one group or the other. In other words, fiscal stabilization takes place only if no specific political group will bear a disproportionate share of the burden. This implies that there should not be any systematic relationship between the real depreciation that has occurred prior to stabilization and the contents of the stabilization programme, which are likely to depend on a host of other factors such as the quality of political and budgetary institutions, partisanship, etc.

The situation differs in the case of closed economic systems. Here, a real depreciation comes with important distributional effects, benefiting owners of tradable goods whilst hurting owners of non-tradable goods and wage earners. In turn, the most exposed political group has an interest in

immediate reform given that delay is expected to increase inflation costs. Weaker socio-economic groups have thus an incentive to strive for consensus on stabilization and to agree on a comprehensive social pact with their opponents. It follows that the fiscal package to be agreed upon is likely to have wide distributional implications offering side-payments to the losers from depreciation. If this perspective is correct, we should see a relationship between developments in the exchange rate and the composition of fiscal consolidation in the case of closed economies.

Anecdotal and survey-based evidence shows that the owners of tradable goods oppose increases in fiscal pressure insofar as these not only undermine international competitiveness, but also profit prospects at home by reducing disposable income. Instead, owners of non-tradables and wage earners normally oppose cuts to public investment in infrastructures and to welfare programmes respectively and would thus support revenue-based adjustments by default (Marzinotto 2005). Given such distribution of preferences, if profit earners concentrated in export-oriented sectors are to concede to those in sheltered sectors and to unions, they need to accept that a large part of the corrective measures falls on the revenue-side of the budget. Would such a political exchange really emerge, then real depreciations should be associated with revenue-based fiscal consolidations in closed economies.

To test for this further implication of our argument, we estimate a panel logit model that uses the composition of adjustment as dependent variable. More precisely, we use a dummy variable with value of 1 in the case of revenue-based consolidations and value of 0 when the consolidation is either expenditure-based or when the burden of adjustment is equally distributed between the revenue and the expenditure side of the budget. A revenue-based consolidation is one in which the largest contribution to the reduction in the primary surplus comes from revenue increases. We also include the change in the primary surplus in the year in which the adjustment takes place; the rationale for including this variable is that the largest the size of the deficit reduction, the more likely it is that the government relies on interventions on the revenue side of the

budget, as taxing programmes tend to be more flexible than spending programmes. The hypothesis laid down above can be summarised as follows:

$$\textit{Hypothesis III: } \beta_2^* < \beta_2 < 0$$

Model (3) in Table 1 reports the results. In open economies, the probability that an adjustment is revenue-based raises as a function of the size of the correction that is deemed necessary; as expected, the greater the reduction in the primary surplus, the more likely that the government concentrates efforts on the revenue side of the budget. The size of the required correction matters also in the case of closed economies, yet, here contemporaneous real depreciations also contribute to increasing the probability of a revenue-based adjustment, as laid down in hypothesis III.

3. Implications for success

Most of the empirical literature on fiscal adjustment is concerned with the question of success. The existing literature measures success in two ways. Either has the adjustment non-Keynesian effects (Giavazzi and Pagano 1990; Hejlm 2002) or it leads to a persistent deficit or debt reduction two or three years after the initial correction (Lambertini and Tavares 2005). At other times, it is suggested that a successful consolidation is one that leads to a long-lasting effect on public finances indeed because it has generated short-run expansionary effects on output and consumption (Alesina and Perotti 1995; Alesina 1998; Alesina and Ardagna 1998).

We are concerned here with the persistence of the fiscal adjustment results. In this paper, a successful fiscal consolidation is one that leads to a 1.5% of GDP cut in the primary balance and is such that, in the two years following the initial correction, the primary balance has either improved or remained unchanged on average over both years. Out of 73 consolidation episodes over 1987-

TABLE 1. PROBABILITY, LIKELY COMPOSITION AND SUCCESS OF FISCAL ADJUSTMENT (1987-2009)

	Model (1)		***Model (2)***		***Model (3)***		***Model (4)***	
	OPEN	***CLOSED***	***OPEN***	***CLOSED***	***OPEN***	***CLOSED***	***OPEN***	***CLOSED***
cons	-2.349	-4.314	-7.130	-12.051	-3.936	-8.083	-3.104	-5.267
	(0.415)***	(0.788)***	(2.123)***	(4.342)***	(1.264)***	(2.873)***	(0.842)***	(1.546)***
$\Delta REER_t$	-0.009	-0.052	-0.168	0.050	0.045	-0.205	0.006	-0.031
	(0.041)	(0.041)	(0.144)	(0.082)	(0.088)	(0.102)**	(0.068)	(0.061)
$\Delta REER_{t-1}$	-0.080	0.035	-0.185	-0.105	0.097	0.132	-0.088	0.07
	(0.037)**	(0.039)	(0.083)**	(0.119)	(0.083)	(0.120)	(0.046)**	(0.071)
$Debt_{t-1}$	-0.005	0.026	-0.005	0.001	0.004	0.006	0.002	0.023
	(0.004)	(0.008)***	(0.011)	(0.019)	(0.009)	(0.023)	(0.006)	(0.016)
ΔY_t	0.316	0.283	-0.554	-1.550	-0.144	0.002	-0.209	-0.515
	(0.111)***	(0.170)*	(0.427)	(0.788)**	(0.343)	(0.441)	(0.225)	(0.336)
SP_t or SP_{t-1}			3.519	5.378	0.816	2.556	1.754	-27.586
			(1.907)**	(2.953)**	(0.260)***	(0.956)***	(0.913)**	(7741.327)
ΔX_t			-5.154	-10.089			-1.437	-3.028
			(1.356)***	(3.702)***			(0.315)***	(0.674)***
ΔR_t			5.231	9.467			0.758	3.121
			(1.384)***	(3.403)***			(0.302)***	(0.796)***
N.obs.	195	221	193	221	193	221	193	221
$PseudoR^2$	0.89	0.57	0.55	0.41	0.62	0.11	0.26	0.26
$LogPseudo-likelihood$	171.35	130.348	36.360	26.009	47.739	22.707	90.694	22.707

Key: Standard errors in parentheses.
***, **, * = significant at the 1, 5 and 10% level respectively.

2009, 48 succeeded, whilst 25 failed. Countries that register the highest success rates are Canada and Norway. Countries with the worst record are Austria, Japan, the Netherlands, and Portugal (see table A in appendix).

There are two mechanisms that might contribute to persistently good fiscal policy outcomes. The first one concerns markets and is thus automatic. Sustained economic growth, whether supported by a real depreciation or not, leads to better-than-expected fiscal results in the following years, even in the absence of discretionary interventions by the government. The second is more about the political economy of reform. If the public is generally satisfied with the way in which the government has handled fiscal reform and with its socio-economic impact, it will confirm the same government in power allowing it to continue the stabilization plan, if necessary. In the case of small open economies, both mechanisms are at work. Real depreciations contribute to successful fiscal adjustment by delivering growth and guaranteeing that the contraction comes with non-Keynesian effects. At the same time, because social pacts induced by depreciation need have an even distributional impact for the reasons highlighted above, it follows that the median voter should be generally satisfied with the reform results and thus prone to confirm the government in office. By contrast, in closed economies, we do not expect any of the two mechanisms at work. Export-led economic growth following depreciation is unable to revert the negative impact from a fiscal contraction. Furthermore, as the social pact that the government and the social partners have come to agree on has important distributional effects, it will probably trigger political conflict ex post once the socio-economic consequences from stabilization become visible, making it difficult for the government in power to be re-elected. In these countries, success in fiscal adjustment is likely to depend upon the internal features of the stabilization programme itself such as its composition rather than on environmental factors.

In order to test for such a hypothesis, we re-run a panel logit model similar to equation (1). In this case, however, our dependent variable takes value 1 for successful adjustments and value 0 for unsuccessful ones. To account for the role of social consensus, we include a dummy for the

emergence (or lack) of a comprehensive social pact in the previous year because, differently from an episode, success in fiscal consolidation is likely to depend upon the existence of an underlying consensus in favour of it or upon the actual measures that have been undertaken. With reference to the available literature, we include three further variables, namely the contemporaneous change in primary expenditures, the change in total revenues and the initial debt level. The available literature has stressed the role of composition in determining success. Lane and Perotti (2003) and Ardagna (2004) show that a cut to wage government consumption can lead to a general compression of the total economy real wage and thus to a rise in the profitability of firms producing positive growth effects. Building on the Ricardian equivalence, as explained in Barro (1974), Feldstein (1982) and Drazen (1990) suggest that cuts to government spending may even boost private consumption if the public is persuaded that fiscal pressure in the next period will be lower. Blanchard (1990) shows that a similar mechanism would be in place even when the adjustment is achieved on the revenue-side of the budget if the public perceives that higher net taxes delay the date of expenditure-based adjustment, which shall happen when the public debt is sufficiently high to induce consumers to believe that some form of adjustment is necessary in the years to come. Moreover, some studies indicate that high initial debt levels enhance the non-Keynesian effects of fiscal contractions. Perotti (1999), Giavazzi et al (2000) argue that after a sizeable deficit reduction private consumers are likely to leave their consumption behaviour unchanged or even increase demand more in high- than in low debt countries because, there, the perception that a regime change has occurred is stronger.

Model (4) in Table 1 summarises the results. Real depreciation, social pacts and the composition of macroeconomic adjustment all matter for its success in small open economies. In line with a vast majority of the available literature (Alesina and Perotti 1995; Alesina and Ardagna 1998; Alesina et al 1998), we find that expenditure cuts offer a greater contribution to success than revenue increases. In closed economies, the only contributing factor to success is the actual content of the stabilization programme, but spending cuts do not show any superior explanatory power. In fact, in closed economies, both revenue increases and spending cuts contribute to success.

4. Case studies

Anecdotal evidence seems to confirm our argument. We focus here on fiscal consolidation in Italy and Belgium over the 1990s. The reasons behind the case selection are as follows. The two countries were subject to the same external constraint over that period, as both were eager to comply with the Maastricht convergence criteria and obtain access to EMU. At the same time, they suffered from similarly large debt ratios to GDP, meaning that they were also subject to the same internal constraint. And yet, macroeconomic adjustment was more successful in Italy than in Belgium: fiscal adjustment episodes were more numerous, deficit reductions larger and more persistent in the former than in the latter; they were further accompanied by the signing of successive social pacts and relied on revenue increases, whilst Belgian authorities intervened mostly on the expenditure side of the budget after the social partners had failed to agree to a comprehensive social pact. Why do countries with fairly similar starting positions end up with such diverging fiscal performances?

We explain divergence in fiscal outcomes by looking at the nature of exchange rate regimes in the two countries and at short-run exchange rate movements. The thrust of the argument is that exchange rate movements contribute significantly to fiscal preference formation, thereby conditioning consensus building in favour of macroeconomic adjustment. A core aspect of our argument is that, in the presence of weak currencies, windows of opportunity open up that allow a reconciliation of the interests of owners of tradable goods, on the one hand, and owners of non-tradables and wage earners, on the other hand. Once the social partners have all recognised the need for (rapid) fiscal adjustment, business actors will be more inclined to accept unions' suggestions for a revenue-based consolidation, as the costs of higher fiscal pressure are offset by the advantages that derive from currency depreciation. In the absence of significant downwards exchange rate movements, forging consensus around fiscal stabilization becomes a much more difficult task, whether the economy is open to international trade or relatively closed.

Italy's effort to put public finances in order before accessing EMU was much facilitated by the Lira's devaluation in 1992. After having supported exchange rate stability over 1988-1991, the Italian Confederation of Industry CONFINDUSTRIA eventually welcomed the Lira's devaluation in 1992 and the country's abandonment of the European Monetary System (EMS), as it was opening up new export opportunities in a period of relatively slow economic growth (Pininfarina 1992). The link to fiscal policy was soon made explicit. It was repeatedly suggested that fiscal stabilization had to take place as soon as possible so as to keep interest rates low avoiding that the Lira's depreciation trend was inverted under financial markets pressure (Walsh 2000). At the same time, the costs of devaluation were kept under control as, shortly before the Lira had exited the EMS, Italian unions had come to agree on CONFINDUSTRIA's proposal for the elimination of wage indexation. By creating a domestic cushion against the risk of imported inflation, this turned out providential. That was also a period in which Italian social partners signed three successive social pacts and were generally involved in all steps of fiscal policy-making to the extent that observers came to describe domestic adjustment as a perfect example of "consensual stabilization" (Cella and Treu 1998). Whilst the Lira was offering a pressure valve, Italian manufacturers seemed more inclined to accept unions' suggestion for a revenue-based adjustment. Reinforcing this reading is the fact that just after the Lira re-entered the Exchange Rate Mechanism (ERM) in 1996, CONFINDUSTRIA started opposing proposals for a further rise in fiscal pressure and began to lobby government for more decisive cuts to the expensive national welfare state.

The Belgian exchange rate policy has been a peculiar one. The country has historically been in favour of exchange rate stability. With the collapse of the Bretton Woods system in 1971, the national government opted almost immediately for a stabilization of the Franc against the DM. It was the significance of export-led growth in this extremely open economy that led domestic actors to prioritise price stability, export competitiveness and economic policy autonomy see (Frieden 2002). Interestingly, this perspective was shared by both export-oriented and sheltered sectors. Currency stability had firstly the advantage of maintaining the price of imported goods constant.

Second, an appreciated Franc protected the economy from imported inflation. Third, a stable exchange rate was believed to favour borrowing from abroad, should deficit spending be necessary. This strategy implied costs too. To maintain competitiveness, wage and price developments had to be kept under strict control. In addition, overly expansionary fiscal policies were risky to the extent that they pushed demand for imports upwards, thereby threatening the exchange rate itself (Jones 2003).

Belgian fiscal policy is to be understood against this background; most fiscal decisions happened to be subject to the exchange-rate constraint. There is ample evidence of these two policy areas being strictly interconnected. For example, just before implementing his austerity programme, Prime Minister Martens succeeded in imposing on a recalcitrant Socialist opposition a realignment of the Franc against the DM, which consisted de facto of a devaluation. If industrial sectors welcomed the prospect of greater export-led growth, Socialists feared the impact of a devalued currency on wages. But, in this instance, Martens was sufficiently persuasive in arguing that his budgetary consolidation plan would keep price levels under control, thus pre-empting the inflationary potential of devaluation. In the 1990s, the Belgian Government continued to pursue a hard currency policy line until the adoption of the Euro. This approach required that wage developments also be consistent with fiscal and exchange rate policy choices. And, in 1991-93, unions' lack of discipline together with the continued operation of automatic wage indexation had the effect of widening Belgium's wage gap with trading partners (FT 12/7/1993).

When, in 1993, domestic actors registered for the first time a real competitiveness loss, with the public deficit still set on an upward trend, an attempt was made to come to a more comprehensive social pact that would include also employment and social security. After its failure following the withdrawal of Socialist union FGTB (FT 25/10/1993), the Government intervened unilaterally, in spite of widespread protest, and introduced a wage freeze, a change to the price index and a conditional reduction in SSC. A renewed attempt to conclude a social pact failed again in 1994 (Arcq and Pochet in Fajertag and Pochet 2000).

5. Conclusions

Just a few years ago, studies concerned with the relationship between fiscal adjustment and exchange rate movements concluded that EMU was deemed to come with ever deteriorating national fiscal balances because, by putting a halt to devaluation, the adoption of a single currency was subtracting an important fiscal adjustment trigger (Lambertini and Tavares 2005). Yet, the persistence of inflation differentials in EMU is such that real effective exchange rates still vary significantly from one country to the other delivering different levels of international competitiveness across euro-zone countries. Most paradoxically, the EMU regime itself is partly responsible for persistent inflation differentials. This stems from the fact that national wage bargainers are subject to different incentives for restraint depending on country size and thus on their capacity to impact on average inflation in the euro-zone (Marzinotto 2009). It follows that countries are subject to different incentive structure when it comes to the management of government spending and taxing programmes, a situation that is, at least partly, induced by the structure of EMU economic governance itself. Not only has EMU distributional implications in the case of monetary policy, but also with respect to fiscal policy. Calls for some form of trans-national wage bargaining framework are justified insofar as they would eliminate dramatic inflation differentials and their substantive policy implications.

REFERENCES (incomplete)

Alesina A. and Drazen A. (1991), "Why are stabilization delayed", in: *The American Economic Review*, 81, 5, 1170-1188.

Ardagna S. (1994), "Fiscal stabilizations: when do they work and why", in: *European Economic Review*, 48, 1047-1074.

Cella G.P. and Treu T. (1998), *Le Nuove Relazioni Industriali. L'Esperienza Italiana nella Prospettiva Europea*, Il Mulino.

Giavazzi F. and Pagano M. (1990),"Can severe fiscal contractions be expansionary? Tales of two small European countries", NBER Working Paper.

Giavazzi F. and Pagano M. (1996), "Non-Keynesian effects of fiscal policy changes: international evidence and the Swedish experience", in: *Swedish Policy Review*.

Lambertini L. and Tavares R. (2005), "Exchange rates and fiscal adjustments: evidence from the OECD and implications for the EMU", in: *Contributions to Macroeconomics*, 5, 1.

Marzinotto B. (2005), *The Political Economy of Fiscal Consolidation in the Run-up to European Monetary Union*, PhD thesis.

Marzinotto B. (2009), "Incentives for restraint in a monetary union: the role of country size, bargaining systems and intra-EMU trade", under review.

Pininfarina (1992), *L'Impegno dell'Industria tra l'Italia e l'Europa: discorsi ed interventi in quattro anni di presidenza, 1988-1992*, Roma.

Walsh J. (2000), *European Monetary Integration and Domestic Politics: Britain, France, and Italy*, London.

APPENDIX

TABLE A. SUCCESSFUL AND FAILED FISCAL ADJUSTMENTS (1987-2009)

	SUCCESSFUL	FAILED
AS	1987; 1998	1988
AU	1996	1997; 2001
BE	1987	
CA	1986; 1987; 1994 1995; 1996; 1997	
DK	2004; 2005	
FI	1994; 1996; 1997 1998	1988; 2000
FR	1996	
GE	2006; 2007	2000
EL	1990; 1991; 1996 2005; 2006	1986; 1994
IE	1987; 1988	1989; 2000; 2006
IT	1992; 1995; 2007	1997
JA	2004	2006
NL	1996	1991; 2005
NZ	1993; 2000	1987; 1989; 1994
NO	1994; 1995; 1996 1999; 2004; 2005	2000
PT	2006	1992; 1995
ES	1996	
SE	1986, 1994; 1995 1996; 1997; 1998	1987; 1989; 2000
UK	1996; 1997; 1998	1988; 2000
TOTAL	**48**	**25**

Source: OECD Economic Outlook 2002, 2007 (author's own calculation)