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To default, or not to default:
What are the economic and political costs of sovereign default?

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Table of contents

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Summary

Most governments go through great lengths to avoid default even if all 'signs' point to an unsustainable public debt trajectory. But why do politicians perceive default as such a dirty word? The reason according to most is that the costs of sovereign default far outweigh the benefits in terms of lower debt burden. In this paper we show that this is not necessarily true. More specifically, the economic costs of sovereign default, as estimated by scholars, are found to be less drastic than most believe possible. The political costs of default, on the other hand, are non-negligible. The expected time of remaining in office is sharply reduced after a government throws in the towel. This may be an important reason why policymakers resort to 'gambles for redemption' in order to delay the inevitable. Unfortunately, this will only amplify the eventual economic costs of default if the gamble does not pay off.

Costs of default factsheet

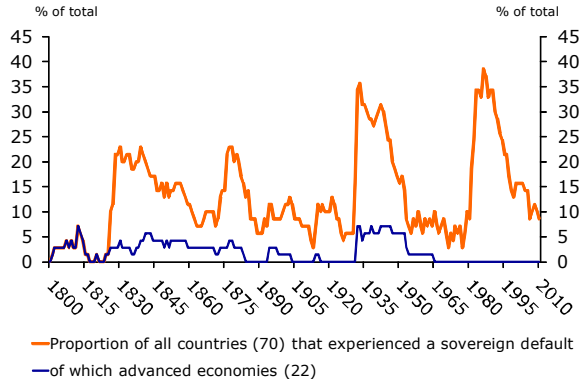
Effect of default on:	Immediate effect	Long-run effect
GDP growth	Negative effect ranging between 0.6 and 5%-points (annual data) No effect when *quarterly* data are considered.	No statistically significant effect after the default year.
Exclusion from capital market	Almost full exclusion.	There is no permanent exclusion. Access is regained between 3½ months and 5.5 years after the default.
Credit rating	Negative effect of up to 3 notches.	No statistically significant effect after 3 years.
Borrowing cost	250 to 400 basis point increase in the 2 years after the default.	No statistically significant effect after 2 years.
Trade	Net decrease of bilateral trade (about 8%). Negative effect on export-oriented industries.	The negative effect on bilateral trade lasts for approx. 15yrs. The effect on export-oriented industries lasts for 2-3 years.
Banking sector	The probability of having a banking crisis conditional on sovereign debt crisis is between 14% and 46%.	
Politicians and policymakers	A 16% decrease in support of the ruling party in the first election after a default. A 50% increase in the probability of replacing the commander-in-chief. A 33% increase in the probability of replacing the finance minister or the central bank governor.	

To default, or not to default

Avoid using the 'D' word at all costs?

The word default seems to be a dirty word amongst policymakers. In the case of Argentina in 2001, for instance, it is reported that even Wall Street bankers had to work hard to persuade the policymaking authorities to accept reality and initiate a debt restructuring (Blustein, 2005). The recent events in the eurozone show that none of the authorities like to readily admit that public debt is on an unsustainable trajectory, let alone admit that default remains as an option on the table. But the rich history of sovereign default[1] (see figure 1) shows that governments have thrown in the towel on numerous occasions when they perceived that they had reached the 'default point' ☐ the point at which the cost of servicing debt in its full contractual terms becomes higher than the costs incurred from seeking a restructuring of those terms. **So our central aim in this paper is to elaborate on the supposed costs that policymakers attempt to avoid when they go through great lengths and budgetary pains to honor their debt.**

Figure 1: The history of sovereign default



Source: Reinhart (2010), Rabobank

To many, the fact that sovereign default is a highly costly affair is a no-brainer since the conventional wisdom is that defaulting on debt must be so costly that hardly makes it a sensible option. At the end of the day, if there are no costs of defaulting, the sovereign would default under all circumstances given the absence of gunboat diplomacy. Anticipating this behavior, investors would never lend to sovereigns to begin with and there would be no sovereign debt. As valid as this argument sounds, we deem it useful to take a closer look at the academic literature to see how high the cost of sovereign default really is. To be clear, we only focus on the costs for the defaulting country and not the costs incurred by foreign entities that hold the sovereign debt.

The economic costs of sovereign default

Once a government defaults, the country will suffer through three main channels ☐ reduction in trade, increase in banking sector problems and loss of reputation. Let's take a look at each channel in turn.

The trade channel

Rose (2002) finds that defaults can strongly hurt exporters and importers because bilateral trade between the debtor and its creditor countries drops by approximately 8% and persists for around 15 years. This seems to be driven by a

[1] The first documented default goes back at least to the 4th century B.C. when 10 out of 13 Greek municipalities in the Attic Maritime Association defaulted on loans to the Delos Temple (Winkler, 1933).

reduction in trade credit, and thus constitutes evidence for credit market sanctions of a particular kind, although legal sanctions could also play a role. Lanau (2008) uses industry-level data and finds that import-competing firms benefit from defaults in relative terms, consistent with the idea that defaults reduce trade and hence competition from abroad. Borensztein and Panizza (2010) also use industry-level data and find that sovereign defaults are particularly costly for export-oriented industries. However, unlike Rose, they find that the effect of default on exports tends to be short-lived (1-2 years). Overall, we can conclude that the reduction of trade as a result of default will have negative welfare implications for the defaulting country (Global Trade Alert 8, 2010).

The financial sector channel

Another reason why defaulting does not seem to be a sensible policy option in countries with a developed financial sector is because the recent defaults have led to the collapse or severe impairment of the domestic financial system, with severe contractionary effects on credit, financial intermediation, and ultimately output. For example, Russian banks stopped playing their intermediary role of providing liquidity and credit to the economy during the crisis in 1998.

This channel is particularly relevant because domestic banks hold significant amounts of government bonds in their portfolios. Thus, a sovereign default would severely weaken their balance sheets and even create the threat of a bank run. To make matters worse, heavily indebted governments – the ones that have the lowest ability to pay – are seriously hampered in preventing a banking crisis given the precarious state of their own finances. De Paoli et al. (2009) find that the probability of having a banking crisis conditional on sovereign debt crisis is 46%. Borensztein and Panizza (2009) found a much lower probability (14%), although that is still 11%-point higher than the unconditional probability. The authors do not find much support for the credit crunch hypothesis. They conclude that, unlike banking crises, defaults do not seem to have a special effect on industries that depend more on external finance.

Reputational channel

Finally, default can trigger **a loss in market access** by sovereigns. Greece's default in 1826, for example, shut it out of international capital markets for 53 consecutive years. Admittedly though, loss of market access has become considerably shorter in the more recent past. For example, several of the countries that defaulted in the late 1990s, including Russia, Ukraine and Pakistan, re-accessed markets within a short period. In fact, the evidence suggests that, while countries lose access during default, once the restructuring process is fully concluded, financial markets do not discriminate, in terms of access, between defaulters and non-defaulters. Several countries that had defaulted in the 1980s were able to attract large capital flows in the 1990s and countries that defaulted in the late 1990s regained access to the international capital market almost immediately after their debt restructurings (the conditions against which they may

re-enter the market at a later stage will be discussed below). Indeed, Lindert and Morton (1989) argue that in the 1930s, and again in the early 1980s, during periods when a number of countries defaulted, external credit was no more inaccessible to sovereign defaulters than to non-defaulters. The authors do not discuss whether this is due to the failure of market participants to differentiate between the countries or if it is due to contagion effects whereby sovereign risk rises in all countries. Jorgensen and Sachs (1989) find that, in the two decades following the 1930s sovereign debt crisis, access to international capital markets for Latin American countries was severely restricted for previous non-defaulters as well as for defaulters. And once capital markets opened up in the late 1960s, defaulters found it as easy to access capital as non-defaulters. Gelos et al. (2004) find that it only took past defaulters 3½ months, on average, to regain market access after defaulting during the 1990s compared with more than 4½ years during the 1980s. Tomz (2007) finds that the reason of default, be it willingness-to-pay or ability-to-pay, matters to a great extent. He concludes that during the interwar period, defaulting countries that were expected to default, given their poor macro fundamentals, could regain access to capital markets twice as quickly as countries that defaulted unexpectedly, given their better fundamentals. Admittedly, Richmond and Dias (2008) find somewhat longer exclusion periods, of 5.5 years in the 1980s, 4.1 in the 1990s and 2.5 in the previous decade. An important reason why loss of market access has fallen recently is because the duration of default episodes (the time it takes for the sovereign to settle with its creditors) have dropped markedly in the post-WWII period in comparison to the period 1800-1945 (3 years versus 6 years).

Even if governments can continue to tap the financial markets for their funding needs after default, it is important to know at what cost they can do so. In specific, an increase in **borrowing costs** can be particularly painful for those countries that pay a large amount of interest on their outstanding debt and need to finance their primary budget deficit (i.e. the deficit excluding interest payments). Ozler (1993) finds that, during the tranquil period of the 1970s, lenders charged up to 50bps more for loans to previous (post-1930) defaulters. Dell 'Ariccia et al. (2002) also find that defaults have a long-lasting effect on borrowing rates and show that countries that participated in the Brady exchange suffered higher borrowing costs in the late 1990s. Some other scholars find, however, that investors react strongly in the aftermath of default but tend to have short memories. Based on a sample of 31 emerging market economies in the 1997-2004 period, Borensztein and Panizza (2009) find that in the year after a default episode spreads are about 400 basis point higher than in tranquil periods, but this premium falls to 250 basis points in the second year and quickly dissipates further in the following years. Interestingly, Lindert and Morton (1989) and Chowdry (1991) find that countries that defaulted in the 19th century and in the 1930s did not suffer higher borrowing cost in the 1970s, and more recent work by Ades et al. (2000) shows that default history (i.e. countries that defaulted in the past) had no significant effect on sovereign spreads in the late 1990s.

Sovereign **credit ratings** may also be negatively affected after default. Cantor and Packer (1996) collect data for approximately 50 countries and find that countries that defaulted after 1970 received a lower credit rating (up to 3 notches on average) in comparison to their peers with comparable macro fundamentals (e.g. a fundamentally BBB-rated sovereign would be rated BB due to its default). Borensztein and Panizza's (2009) estimates indicate that default history leads to a slightly smaller drop in credit rating (1.7 notches on average). However, the results of the authors indicate that defaults episodes do not have a long-term impact on credit ratings. In fact, only defaults in the 1995–2002 period are found to be significantly correlated with credit ratings over the 1999–2002 period. Reinhart et al. (2003), however, find that countries with a history of defaulting on their external debts received a lower credit rating over the 1979-2000 period than non-defaulters that displayed similar financial strength.

It should be stressed that the impact of the increasing sovereign risk premium is not likely to remain limited to the cost of public debt, but it will also affect the **cost of capital for the private sector**. For the international financial markets the rating (and thus risk premium) of the sovereign is usually the benchmark applied to private-sector entities of that country – the so-called sovereign ceiling. This implies that banks and non-financial corporates are likely to have to pay an even higher risk premium. Hence, the increase in borrowing costs for the government is likely to be transmitted to the entire economy with a further negative impact on the growth of productive capacity and consumption demand. In fact, Dooley (2000) shows that output losses, assumed to be due to domestic residents being unable to borrow from domestic as well as foreign creditors in the aftermath of crises, may be the most important incentive for debt repayment. Arteta and Hale (2008) show that foreign credit to the private sector collapses in the aftermath of a default, though it is not clear whether this is driven by a reduction in the supply of credit or a reduction in the demand for credit. Das et al. (2010) find that sovereign defaults have a strong negative impact on corporate external borrowing in the period 1980-2004, leading to a drop of up to 40% after controlling for fundamentals and shocks. Thus, deterioration in risk perceptions (higher sovereign bond spreads and/or lower sovereign ratings) has a strong negative impact on corporate access to capital.

The effect of default on GDP and unemployment

Taking all the channels together, one can assume that GDP will contract once default is announced. De Paoli et al. (2009) estimate that median output can drop anywhere between 5-10% after a sovereign debt crisis, depending on the measurement method. Borensztein and Panizza (2009) find that, on average, default is associated with a decrease in growth of 1.2%-points for each year that the country is in default. Their estimation is consistent with Chuan and Sturzenegger's (2005) finding that default has a negative effect on growth that ranges between 0.5-2%-points. That said, Levy Yeyati and Panizza (2011) argue that using quarterly GDP data yields a starkly different message. In particular, they

show that defaults have no significant negative impact on successive output growth and, if anything, mark the final stage of the crisis and the beginning of economic recovery. Put simply, they believe the results based on annual observations of GDP is misleading since high-frequency shocks tend to spill over to the subsequent period when output is reported at a lower frequency. For example, the sharp GDP contraction in the second half of a given year can be registered as an output decline in the following year (economists call this the *carry-over effect*), despite the fact that the economy started to grow early that year. Hence the authors claim that defaults in fact mark the inflection point at which output reaches its minimum and starts to recover. More specifically, on a quarterly basis, GDP growth was stronger after default in 70% of the cases and exceeded long-term growth in 50% of the cases.

Similarly, Levy Yeyati and Panizza (2011) find that whatever negative influence default may have on unemployment, it materialises before the actual default takes place. In particular, their regression results indicate that unemployment starts decreasing in the quarter in which the default takes place and continues to decrease in the quarter after the default.

The political costs of sovereign default

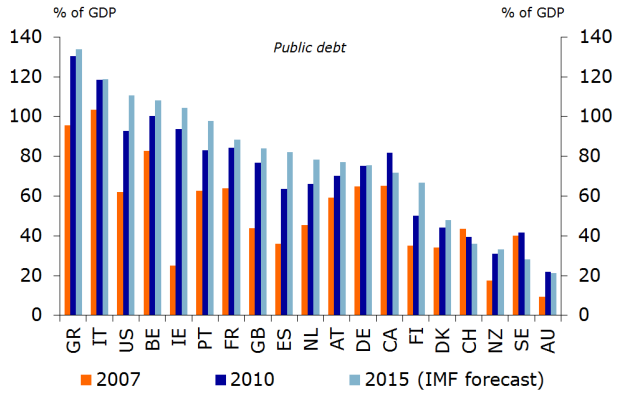
Thus far, we have focused on the economic costs. Nevertheless, the political costs of default matter as well, especially to the incumbent government. So let's take a look at how policymakers fared after default. Borensztein and Panizza (2009) look at 19 episodes for which they have data on electoral results before and after defaults. They find that the ruling coalitions lost votes in 18 countries (the exception was Ukraine). They also find that, on average, ruling governments in countries that defaulted observed a 16%-point decrease in electoral support, and that in half of the cases there was a change in the commander-in-chief either in the year of the default episode or in the following year. Similarly, the probability of observing a change of the finance minister and/or central bank governor increases by 33%. To this end, we can argue that regardless of the impact on general (economic) well-being, policymakers may want to avoid defaults in order to extend their time in office.

Conclusion and policy implications

In this article we tried to find out why politicians and economic policymakers sometimes go to a great length to avoid a default. As far as economic costs are concerned, scholars seem to be divided. Admittedly though, the estimations of economic costs of default seem to be smaller than most assume, at least in the long-term. That by no means implies that defaulting is cost-free. All the studies have focused on the average and some defaults have obviously been more costly than the average. In any case, it is somewhat reassuring that most countries that defaulted fared relatively better than most believe possible. One must not forget that not defaulting is very costly as well. Some of the countries that have

seen their public debt-to-GDP ratios spiral out of control as a result of the recent global financial crisis (see figure 2) will need to go through years of painful fiscal austerity measures to see a meaningful decline in their public debt levels (Kamalodin, 2010).

Figure 2: Public debt-to-GDP ratios are on the rise



Source: Reuters EcoWin, IMF

The political costs of default are decisively high. There seems to be evidence that defaults do not bode well for the survival in office of finance ministers, central bank governors and the top executive politicians. Against this backdrop, politically costly defaults might lead to 'gambles for redemption' in individual cases were a default seems unavoidable looking at the fundamentals. This will only amplify the eventual economic costs of default if the gamble does not pay off. Delaying unavoidable defaults is costly for at least three reasons according to Borensztein and Panizza (2009). First, non-credible restrictive fiscal policies are ineffective in avoiding default and lead to unnecessary output contractions. Second, they may prolong the climate of uncertainty and push interest rates to even higher levels and thus have a negative effect on investment and private sector balance sheets. Third, delayed default may have direct harmful effects on the financial sector as banks might be forced to increase their holdings of government bonds (e.g. through moral suasion), which later collapse in value. Moreover, the climate of uncertainty and the weakening of the banks' financial position may trigger a deposit run.

What can we conclude from all the gathered evidence? First, defaults are costly in both economic and political terms. But the costs of the former may not be as high as it is commonly thought. Of course, any government that wishes to default must take a close look at its country specific issues. For example, if a country has a thinly capitalised banking system that is greatly exposed to sovereign debt, then the default costs can be much higher than the averages calculated in the academic studies. What's more, even Levy Yeyati and Panizza (2011) admit that in all defaults studied the economic recovery was helped by exchange-rate depreciation. This is certainly bad news, for example, for the periphery countries in the eurozone given that they are in an irrevocably fixed exchange rate regime. Nevertheless, it is somewhat reassuring that the defaulting country will not immediately enter into years of economic pain and chaos if it has no other option left but to default. Politicians must take note of this and try not continue to avoid default beyond the point where the default is becoming unavoidable. If the public debt trajectory is definitely on an unsustainable path, default will happen sooner or later. Accepting this early on, despite the risk of subsequently being voted out office, can reduce the economic costs.

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Colophon

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