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Mind the fiscal speed limit

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Introduction

It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.

- Mark Twain

Introduction

The eurozone debt crisis acted as a wakeup call for most governments in the advanced countries. All of a sudden, economic stimulus measures were abandoned and fiscal prudence became all the rage. This quick shift from Keynesian policies to aggressive austerity unleashed a huge debate amongst economists and policymakers regarding the timing of fiscal consolidation. The deficit hawks warn that if austerity is not implemented swiftly then countries will go 'the way of Greece'. Meanwhile, Keynesians argue that if budget deficits are reduced too fast to please the market and the rating agencies, the fragile recovery might be chocked.

The Netherlands is also very much in the centre of this debate. The Dutch government has opted for a 'cold shower' approach partly out of ideology and for a part due to the belief that the economy will continue to grow amid private and public sector deleveraging and a weak external environment. This is considered unacceptable by some because they believe the country's large fiscal space allows it to proceed with moderate adjustment to give recovery a chance to gather momentum.

In this Special we present qualitative as well as quantitative evidence that fiscal policy has a larger short-term negative impact on growth than the government currently expects. So we do side with the camp that calls for a slowdown in the pace of fiscal consolidation. The most important reasons are (i) households are liquidity constrained, (ii) domestic demand is weak, (iii) government bond yields have small room to fall, (iv) monetary policy space for stimulating economy is limited, and (v) major trading partners are also experiencing sluggish growth.

To make sure that interest rates and sovereign ratings stay intact, the government must announce a credible medium-term austerity package and move forward with structural reforms. The advantage of this strategy is that economic growth will not suffer as a result of irresponsible fiscal policymaking. The Dutch politicians should realise that the current austerity strategy is inflicting unnecessary damage to the economy. Changing course of action now makes the fiscal adjustment much more acceptable/tolerable as unemployment will not rise substantially.
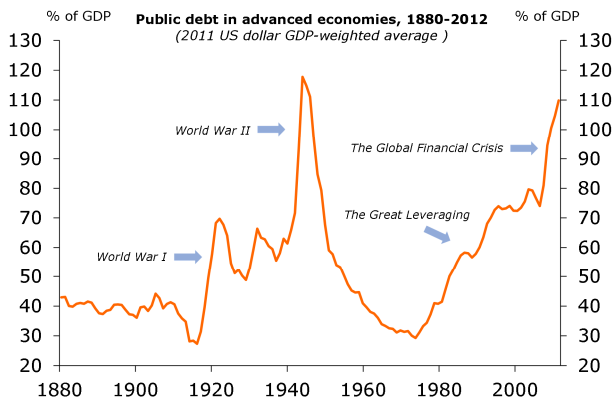
Sovereign risk in historical perspective

Sovereign risk in the industrialised world was considered a non-issue for decades. The simple reason was that advanced countries seemed to have 'graduated' from periodic bouts of government insolvency given that they did not opt for a default since the end of WWII. This was an important reason why public debt in the advanced countries surged following a dramatic drop in the post-WWII period (figure 1). But the calm in the sovereign debt market came to an abrupt end in the aftermath of the global financial crisis (GFC). Public debt started spiralling out of control in many countries as yawning output gaps combined with falling asset prices and shrinking financial sector profits started to take their toll on public finances. The direct and indirect support for the hard-hit banking sector also managed to push debt levels higher (figure 2). Fiscal positions took an extra hit when governments decided to embark on the biggest Keynesian experiment in living memory to prevent the repeat of the Great Depression.

Figure 1: Public debt in historical perspective
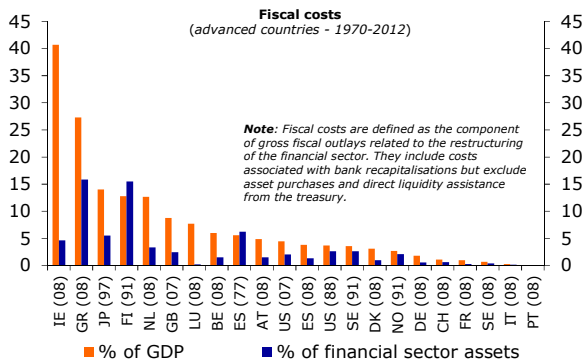

Source: IMF

Figure 3 shows that fiscal policies turned highly expansionary in 2008 and 2009 in response to the GFC. The 'Great Rescue' paid off as the world economy has been tiptoeing back from the precipice since mid-2009. However, this was a 'Pyrrhic victory' for some sovereigns as they themselves came under the market spotlight soon after. Investors realised that not all governments had the fiscal space to rescue their economies without bringing their own solvency into question. The result was a debt crisis in Greece, Cyprus, Ireland, Italy, Portugal and Spain.

Figure 2: Banking sector bailout costs

Source: Laeven and Valencia (2012)

Figure 3: Fiscal policy during the financial crisis

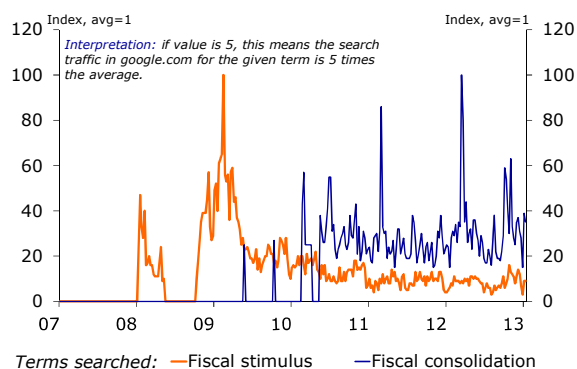*Defined as the change in the primary budget balance (cyclically adjusted)
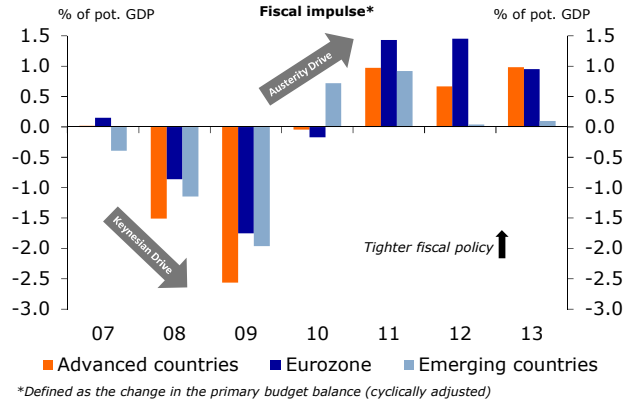
Source: IMF, Rabobank

Sovereign risk in historical perspective

Following the euro crisis, most industrialised countries burned their fiscal stimulus recipe books and started to bind themselves to the mast of fiscal prudence. Not only was economic stimulus outlawed, but numerous belt-tightening measures were introduced in the hope of restoring order to the public finances and maintaining financial market calm. A look back at figure 3 makes it clear that fiscal policies in the advanced countries, especially in the eurozone, turned contractionary since 2011. Interestingly, the term 'fiscal stimulus', which was searched often in google during 2008/09, lost its appeal from 2010 onwards and instead 'fiscal consolidation' started to become an interesting term (figure 4).

Figure 4: A googling exercise

Interpretation: if value is 5, this means the search traffic in google.com for the given term is 5 times the average.

Terms searched: —Fiscal stimulus —Fiscal consolidation

Source: Google trends

With so many economies in fiscal consolidation mode, a debate has been raging both in the press and within the economics profession about the impact of fiscal policy on growth. At the heart of this debate lies the so-called fiscal multiplier, which is formally defined as *the ratio of a change in output to an exogenous change in the budget deficit* with respect to their baselines (Spilimbergo et al., 2009). In simple terms, the larger the multiplier, the more costly the fiscal consolidation in the short run. In the extremis, fiscal multipliers can be large enough to make austerity self-defeating. By this we mean the reduction in government spending and/or increase in taxes can lead to such a strong fall in economic activity that the budget balance (as a share of GDP) deteriorates.

To appreciate the factors affecting a fiscal multiplier one can consider the following function:

$$Fiscal\ Multiplier = f(Financial\ constraint, Confidence, Monetary\ space, External\ sector)$$

The first term, financial constraint, reflects the *ability* of households and firms in increasing their spending during consolidation episodes. If the private sector is liquidity/credit constrained, then it will not be able to fill in the spending gap left open by the public sector. Röhn (2010) finds that multipliers are larger when private agents are financially constrained.

As for the 'confidence' term, it partly refers to 'non-Keynesian' wealth effect on consumption and investment stemming from the expected reduction in future taxes. According to the expansionary fiscal contraction (EFC) hypothesis, a fiscal adjustment may be expansionary if 'Ricardian' agents believe that fiscal tightening generates a change in regime that eliminates the need for larger

adjustments in the future. This induces the private sector to increase spending during fiscal consolidation episodes (Giavazzi and Pagano, 1990). Of course, this will only take place if the level of uncertainty amongst households and firms is *low*. For example, rising job or income insecurity will result in an increase in precautionary savings and postponement of investment plans even if balance sheets are healthy and credit is readily available. So the multiplier is higher when uncertainty rises. The confidence term also reflects the credibility effect on the real interest rate. Large and credible consolidation programmes can anchor expectations of market participants and, thereby, lead to a drop in the risk premium the government has to pay on its debt. The reduction in government bond yields can, in turn, push interest rates for the private sector downwards, which will have positive effects on the overall economic activity.

'Monetary space' stands for the accommodating reaction of central banks to contractionary fiscal policy. The more room the monetary authorities have to offset the deflationary effect of the fiscal shift, the smaller the multiplier. The 'external sector' term, for a part, relates to the gains in international compe-titiveness from the negative impact of adjustment on inflation. Therefore, multipliers are considered to be smaller for more open economies (Ilzetski et al., 2011). At the same time, this term also captures the impact of external demand on fiscal consolidation. Research shows that stronger external demand can push the multiplier downwards (IMF, 2011).

Multiple estimates of multipliers

The factors discussed above make it clear that there is unlikely to be such a thing as 'the' fiscal multiplier. The size of fiscal multipliers is *country-, time-, and circumstance-specific*. Across countries, the openness of the economy, the exchange rate regime, the degree to which monetary policy or automatic stabilisers offset the fiscal adjustment impact are all likely to determine the multiplier. But even within countries, the state of the economy and the banking sector matter. Even the budget-tightening's *composition* – taxes versus spending – can change the impact of fiscal policy on growth. Holland and Portes (2012) find that multipliers related to revenue measures are, ceteris paribus, smaller than expenditure measures during consolidation episodes.

Thus, it should come as no surprise that economists disagree on the reliability of the multipliers, partly because of methodological differences (e.g. DSGE versus VAR models), and partly because the range of estimates, even for similar methodologies, is often quite large (Spilimbergo et al., 2009). Baunsgaard et al. (2012) offer a comprehensive literature review on multipliers by reviewing a total of 37 studies. They find that government spending multipliers range between 0 and 2.1, with a mean of 0.8 during the first year after fiscal measures are taken. Government revenue multipliers range from about –1.5 to 1.4, with a mean of 0.3. The consensus amongst international economic organisations and major central banks before the crisis was that the multiplier was around 0.5 (IMF, 2012).

Unfortunately, such findings do not help countries formulate fiscal policy. Those in the 'exit quickly' camp (informally known as deficit hawks) point to papers that find smaller multipliers and recommend a front-loaded fiscal consolidation plan. The argument is that once governments begin with the adjustment process, real interest rates will fall, Ricardian agents will spend more and central banks will dampen the deflationary impact by loosening policy (Alesina and Perotti, 1995; Alesina and Ardagna, 1998). At the same time, the external sector will benefit from competitiveness gains and will further support activity. The added benefit of the 'cold shower' approach is that countries will not suffer from austerity fatigue.

Meanwhile, the 'exit slowly' camp (also known as Keynesians) claim that fiscal multipliers estimated in 'normal times' are irrelevant in the current circumstances (DeLong and Summers, 2012). They fear that fiscal thrift will do nothing more than choke the recovery and, in the worst case scenario, become self-defeating. The most important reason is that the private sector is believed to be too weak given the long-drawn process of balance sheet repair. Moreover, the confidence effect will not be large for those countries with relatively low interest rates (i.e. large fiscal space) and high degree of macroeconomic uncertainty. Finally, the fact that policy rates in most major central banks are stuck at the zero-lower bound (ZLB) and that external demand remains particularly weak means multipliers are larger than usual.

A number of renowned economists[1] have recently come to support the latter camp. Arguably, the most popular evidence was presented by the IMF's Chief Economist, Olivier Blanchard, and his colleague Daniel Leigh in a box published in the October 2012 *IMF World Economic Outlook.* The authors wanted to see whether they have been underestimating fiscal multipliers during the crisis. They did this by simply regressing the forecast error for real GDP growth on forecasts of fiscal consolidation. Under rational expectations, and assuming that the correct model has been used, the coefficient on the fiscal consolidation forecast should be zero. What they found was a negative relation between fiscal consolidation forecasts and subsequent growth forecast errors (figure 5) suggesting that forecasters underestimated fiscal multipliers (new estimates were in the range of 0.9 to 1.7). This is because growth disappointments have been larger in economies that planned greater fiscal cutbacks.

Figure 5: Growth forecast errors and fiscal consolidation plans (20 advanced economies)
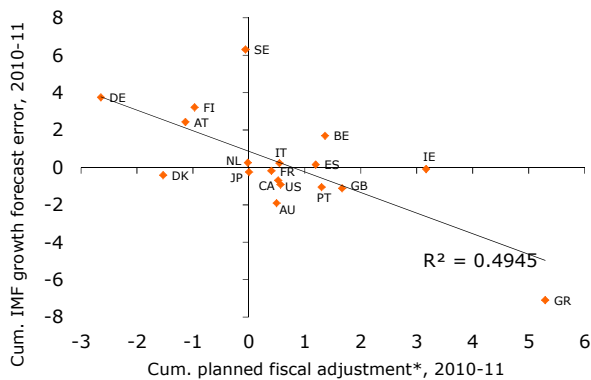
Defined as the change in the structural primary budget balance (% of pot. GDP)

Source: Blanchard and Leigh (2013)

This finding created a lot of furore in the policy circles and reinvigorated the debate over the size of fiscal multipliers. In response to the criticism expressed by some influential policymakers including the president of the Dutch Central Bank[2], the authors restated their methodology, examined their robustness, and consider a number of extensions. The more 'technically-advanced' approach yielded the same result; namely, multipliers were substantially above 1 in the early years of the crisis (Blanchard and Leigh, 2013).

Actually, this result is not very controversial as some other scholars have also reached similar conclusions. Based on US data, Auerbach and Gorodnichenko (2012a) find that multipliers associated with government spending can fluctuate from being near zero in normal times to about 2.5 during recessions. Baum et

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[1] The group of economists in this camp include the likes of Paul Krugman (Princeton university, Noble-prize winner), Bas Jacobs (Erasmus University), Dani Rodrik (Harvard university), Jeffrey Frankel (Harvard university), Brad DeLong (University of California, Berkeley), Coen Teulings (Head of CPB Netherlands Bureau of Economic Policy Analysis), Joseph Stiglitz (Columbia university, Noble-prize winner), Alan Blinder (former board member of the Federal Reserve), Martin Wolf (chief economist of the Financial Times), Robert Skidelsky (University of Warwick), David Blanchflower (former board member of the Bank of England), Paul De Grauwe (University of Leuven), Lawrence Summers (former US Treasury Secretary), Robert Solow (Massachusetts Institute of Technology, Noble-prize winner), John van Reenen (London School of Economics), Giancarlo Corsetti (University of Cambridge), Nouriel Roubini (New York university) and Olivier Blanchard (chief economist of the IMF).
[2] "*Knot en De Jager bestrijden berekeningen IMF*". De Volkskrant, October 12, 2012.

al. (2012) investigate the effects of fiscal policy on output during economic expansion and contraction for the G7 countries (excluding Italy) and conclude that multipliers are larger during downturns. The argument is that in times of economic downturns (negative output gap), the crowding-out argument — that higher government spending displaces private spending — is less applicable due to excess capacities in the economy (Auerbach and Gorodnichenko, 2012b). What's more, the proportion of credit-constrained households and firms is higher. Batini et al. (2012) also estimate the impact of fiscal adjustment in the US, the eurozone and Japan, allowing multipliers to vary across recessions and booms. Fiscal adjustments found to be substantially more contractionary if made during a recession than during an expansion. First year cumulative multipliers for consolidations that began during downturns range between 1.6 - 2.6 for spending cuts while ranging between 0.3 - 1.6 during expansions.

The Dutch fiscal multiplier

A qualitative approach

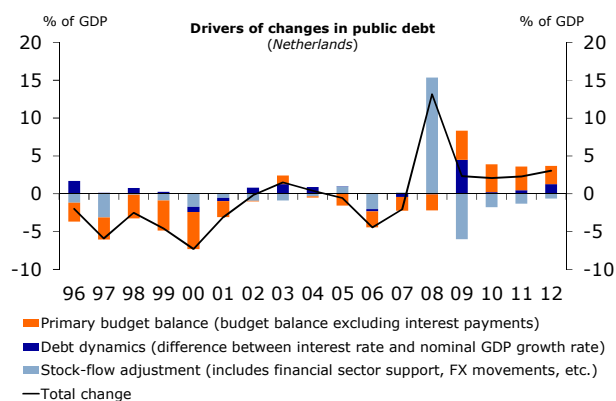The Dutch public finances have also been on weakening trend since the inception of the crisis. The public debt-to-GDP ratio, which was 45% in 2007, increased by a whopping 23%-points by end-2012. Figure 6 shows the public debt decomposition[3] of the Netherlands. It is clear that the stock-flow adjustment (serving as a proxy for financial sector support and other statistical adjust-ments) had the largest positive contribution to the public debt-to-GDP ratio in 2008. This was the direct result of the domestic banking crisis. In the subsequent years, the primary budget deficit and worsening interest rate-growth differential were the primary factors pushing the debt ratio higher.

Figure 6: Public debt decomposition

% of GDP — Drivers of changes in public debt (*Netherlands*) — % of GDP

- ■ Primary budget balance (budget balance excluding interest payments)
- ■ Debt dynamics (difference between interest rate and nominal GDP growth rate)
- ■ Stock-flow adjustment (includes financial sector support, FX movements, etc.)
- — Total change

Source: Reuters EcoWin, OECD, IMF, Rabobank

Against this backdrop, the Dutch government has introduced successive rounds of austerity measures to restore fiscal sustainability (and to achieve the 3% deficit target as agreed with the European Commission). The fiscal consolidation packages of Rutte I, Rutte II and the Budget Agreement lead to a total austerity amounting to EUR 46bn (or 7.5% of GDP) over the period 2011-17. Of this, around EUR 34bn is to be taking place in the coming years. The resolve of the government to carry out tough belt-tightening measures has sparked an internal debate regarding the merits of exiting quickly versus slowly. Here too, economists and policymakers take opposing views and this is confu-sing the general public as to which way is best. The exit quickly camp provide a number of arguments that suggest the Dutch multiplier is small and, therefore, a frontloaded approach to fiscal consolidation is justified. Naturally, these are heavily contested by the exit slowly camp, which we include ourselves in, that offers a number of reasonable counter arguments.

Before we get into the technical details of our multiplier estimation, we will cover each factor presented in the equation above to assess the size of the multiplier in a qualitative manner.

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[3] The change in public debt-to-GDP ratio (Δd) is dependent on the government's primary deficit, pd (i.e. budget deficit excluding interest rates), the difference between the long-term interest rate, r, and nominal GDP growth rate, g, multiplied by the public debt-to-GDP ratio (this is known as debt dynamics), and the stock-flow adjustment (SF). More formally, debt accumulation in the next period ($t+1$) is given by $\Delta d = pd_{t+1} + \delta_{t+1} d_t + SF_{t+1}$ where $\delta \approx r - g$. All variables except r and g are defined as percentage of GDP.

The Dutch fiscal multiplier

Financial constraint

While on average the net wealth position of Dutch households is extremely good – although capital is mostly held in very illiquid assets such as pension funds and property – the spending power from current income is very low. Because of our compulsory pension savings, the Netherlands has one of the best capital-funded pension systems in the world. At the same time, thanks to this system, voluntary savings in the Netherlands are low. This is evident from, among other things, the negative personal savings rate (savings from current income). The same applies in a country such as Denmark: a high degree of pension savings goes hand in hand with a low personal savings rate (figure 7). Countries with a relatively less extensive supplementary pension system, such as Germany, have a structurally highe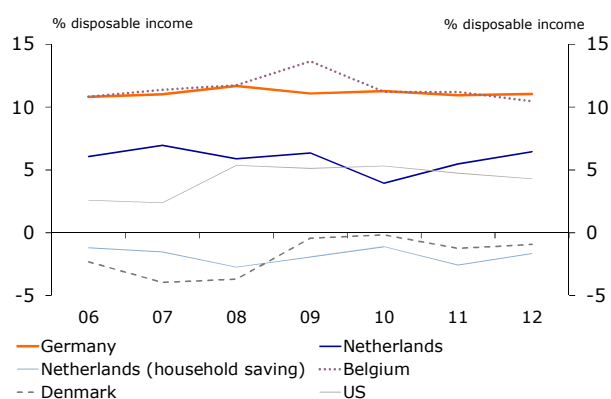r savings rate. This relationship does not apply in all cases, but ultimately most of the differences – besides pension savings in the second pillar – are due to the extent to which (net) household assets are accumulated.

Figure 7: Negative household savings rate in NL

Source: OECD, CPB

Neither pensions nor home equity can be easily liquidated. The latter will increase further as households are increasingly forced to repay their mortgages. This is good for financial stability at both macro and micro level. There is, however, one big drawback. When real disposable income of households diminishes due to austerity, rising unemployment and negative purchasing power and the situation continues to be highly uncertain, fiscal consolidation will have an even stronger braking effect on economic growth because households will have no other option than to consume less. The negative outlook regarding the development of both capital and income will strengthen this effect. It is no surprise, therefore, that in recent years the decline in private consumption has been the largest drag on output growth. In such situations, fiscal multipliers are greater than in times of economic strength.

Confidence

The above analysis suggests that we must not expect Dutch households to behave in a Ricardian manner. Even if confidence rises – as people expect lower taxes in the future – the liquidity constraint of consumers will inhibit them from increasing spending. Besides, the economic headwinds consumers are facing in the form of rising unemployment, rising uncertainty, tighter credit conditions, falling asset prices, and government cutbacks will make them more hesitant to frontload consumption.

The Dutch fiscal multiplier

But what about the confidence in the financial markets? In our view, the argument that consolidation bolsters growth through lower interest rates is equally unconvincing in the case of the Netherlands, which continues to service its public debt at record-low interest rates (figure 8). For this reason, we believe the marginal fall in interest rates, even if it happens, will hardly help. We should remind ourselves that one of the important reasons why Sweden and Finland had successful consolidation programmes in the 1990s was because their long-term interest rates halved between 1994 and 1998. And during the fiscal consolidation of Ireland (1982-86) long-term interest rates dropped by a whopping 10%-points. The Netherlands cannot experience such a dramatic fall in government bond yields no matter how fast the deficit falls.

Figure 8: Government bond yields (10y)
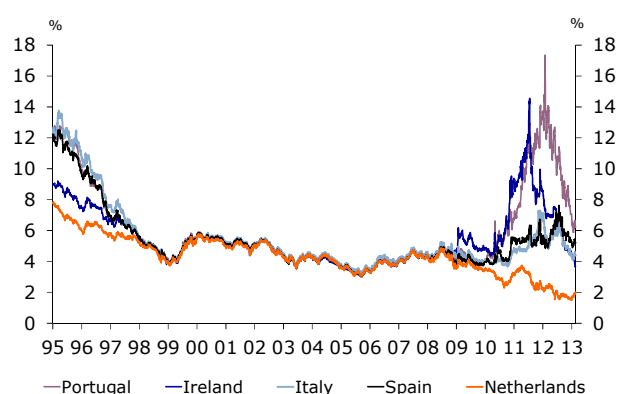
Source: Reuters EcoWin

The proponents of the quick exit strategy argue that interest rates will rise if the government slows down the pace of consolidation. A possible trigger for this could be a loss of the much-cherished AAA rating. But the experiences of Japan, France and the US lead us to conclude that these fears are exaggerated. Furthermore, the only reason why doubts were raised over the soundness of the Dutch public finances related to the question of long-term solvency due to rising healthcare and pension costs as well as the mortgage interest rate deduction. Great strides have been made in all three areas in recent years, meaning that current estimates suggest that the current social arrangements can be readily transferred to future generations.

Monetary space

The fact that the ECB is near the ZLB means monetary policy cannot cushion the fiscal blow in the Netherlands. Even lowering the policy rate by 75 basis points is insufficient. And this matters for the Dutch fiscal multiplier. Christiano et al. (2011) show that multipliers exceed 3 when central banks hit the ZLB. Almunia et al. (2010) take data for 27 economies during the 1930s—a period during which interest rates were at or near the ZLB—and find that fiscal multipliers were about 1.6. Since liquidity-trap episodes have been rare, only a few studies investigated fiscal multipliers under such conditions. Even more challenging is to assess the impact of unconventional monetary policy loosening on multipliers.

External sector

Since the Netherlands is a very open economy, there are reasons to believe that the fiscal multiplier is smaller than in many other countries (CPB, 2010b). The

reason is that government cutbacks results in an improvement in price competitiveness. For example, Lane and Perotti (2003) find that a reduction in public wages has the effect of 'crowding in' an expansion of output, employment and profitability in the trade sector. This happens because a decrease in government employment reduces the probability of finding a job if not employed in the private sector, and a decrease in government wages decreases the worker's income if employed in the public sector. In both cases, the wage demanded by the union for private sector workers decreases thanks to an excess supply of labour in the private sector. The country's price competitiveness will improve and this can push exports higher.

Figure 9: Exports of goods by destination, 2011

20.9%

13.8%

1.3%

64.0%

■ EMU   ■ Asia   ■ Rest advanced   ■ Rest developing
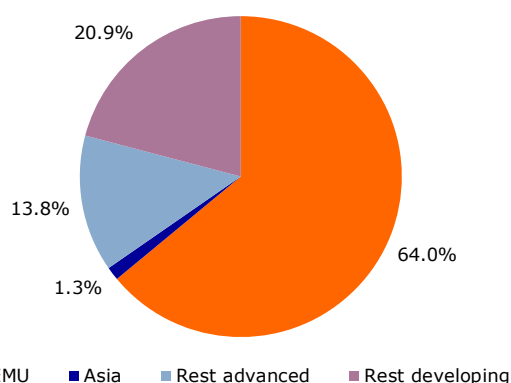
Source: IMF

The question is, however, whether the Dutch government can rely on an export-led recovery while its major trading partners are themselves facing severe headwinds? Although the share of goods exports to the emerging countries have been increasing over the past decade, it is still way too small to make a significant difference (figure 9). Over 80% of Dutch exports are destined for the advanced countries, which will have many more years of weak growth amid simultaneous private and public sector retrenchment.

To sum up, the provided arguments suggest that the Dutch multiplier is probably larger than during normal times. Households are unlikely to loosen their purse springs while facing massive headwinds. Government bond yields do not have much more room to fall. The monetary authorities are very close to the ZLB. And the external sector will not come to the rescue when most major trade partners are experiencing sluggish growth. Expecting a small fiscal multiplier in such circumstances is unwarranted. In the next section we will conduct a quantitative analysis to estimate the size of the Dutch multiplier by taking current economic conditions into account.
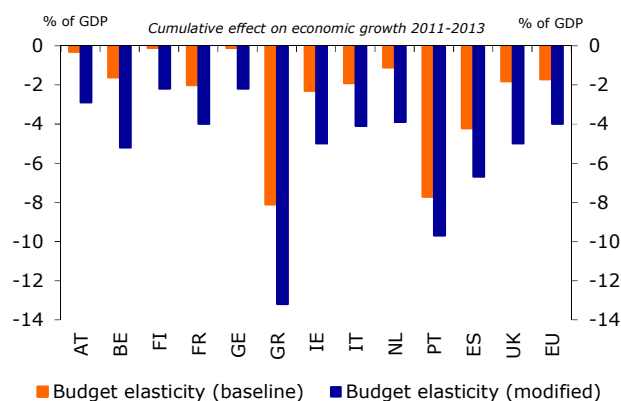
The Dutch fiscal multiplier

A quantative approach

Using the macroeconometric model NiGEM, Holland and Portes (2012) show that when one considers three factors – weak external demand, tight credit conditions and lack of monetary policy space – the fiscal multipliers for all European countries are higher for the period 2011-2013 (figure 10). The effect on GDP is greater, especially for open economies, because of the effect of fiscal consolidation in other countries through the trade channel. In the case of the Netherlands, this means the effect on GDP will be 2.5 times greater. In almost all countries, fiscal consolidation will not result in a decline in the public debt-to-GDP ratio during 2011-2013; it will actually lead to an increase. For the Netherlands, the effects in this period are limited, also because of the relatively modest cuts during the calculation. For instance, the austerity package in the Spring Agreement and the later government agreement for 2013 are not included.

A tentative calculation

We conducted the same exercise using the same macroeconometric model NiGEM, but for the period 2013-2017, and mainly focused on the Dutch economy. The international fiscal impulses will be passed from our major trading partners via the improvement in the primary budget balance. Compared to the 2011-2013 period for which the calculations of Holland and Portes (2012) were based on, the international fiscal impulses are generally considerably smaller. For the Netherlands, a key issue is that Germany (by far the most important trading partner) does not introduce any additional sizeable austerity measures. Moreover, the assumption is that half of the fiscal consolidation in the Netherlands will consist of spending cuts and the other half of higher taxation. The calculation includes the total announced austerity packages of the Cabinets Rutted I and II as well as the Budget Agreement 2013-17 (table 1). A sub-division is made into government spending and taxation measures, but considerably less refined and detailed than the calculation of the CPB. This means that by definition the effect on the economy will not come out the same as in the calculation of the CPB with Saffier II model.

Figure 10: Effect of austerity programmes in 2011-13

Source: Holland et al. (2012)

Table 1: Fiscal multiplier under Rutte I, Budget agreement and Rutte II

		Per year	5- years effect	Multiplier
Rutte I	GDP	-0.40	-2	
	Austerity (% GDP)		-3.0	0.67
Spring Agreement	GDP	-0.3	-1.5	
	Austerity (% GDP)		-1.4	1.11
Rutte II	GDP	-0.2	-1	
	Austerity (% GDP)		-2.7	0.37
Total	GDP		-4.5	
	Austerity (% GDP)		-7.0	0.64

Source: CPB (2010a; 2012b; 2012c)

The Dutch fiscal multiplier

The calculation of the effects of these fiscal impulses in the standard NiGEM shows a fiscal multiplier of 0.38 for the period 2013-2017, which is lower than CPB's estimation of 0.64 (table 1). After one year, the CPB's Saffier II model estimates a spending multiplier of 0.9 and an income tax multiplier of 0.4. Weighted with changes in taxation and social insurance contributions and spending (so not using the detailed method used by the CPB to calculate the effects of government agreements) this comes to approximately 0.7. This difference can be fully explained by a difference in parameters and the structure of the model. Saffier II has a much more detailed representation of the Dutch institutional structure than NiGEM and the effects can be processed in the model in more detail. However, probably the most important effect is whether to adjust for re-exports or not. As noted correctly by Jacobs (2012), a large proportion of Dutch imports are re-exported, with or without processing. NiGEM however uses an import ratio that is not adjusted for this. The result is that too much of the fiscal consolidation will leak abroad. We adjust for this by halving the import ratio in NiGEM (from 0.7 to 0.35). After this adjustment, the multiplier in NiGEM becomes 0.7 for the 2013-2017 period, more or less the same as that calculated by the CPB.

Credit rationing
Credit rationing (or limited spending potential) can be shown if we adjust the short-term elasticity in the consumption function. The greater the elasticity, the more household consumption is affected by fluctuations in current income. The standard value in NiGEM for the Netherlands is 0.23: in other words, for each euro that is saved, in the standard situation there will be 23 cents less private consumption. The greater the elasticity, the greater the short-term effect on consumption. It is also the case that the effect of tax measures is generally greater than the effect of measures on spending.

Figure11 shows that the first-year tax multiplier can thus vary between 0.1 and 0.6. The standard value in NiGEM is 0.23. There are, however, good reasons to believe that the elasticity of income will be higher in the next few years. Declining levels of capital, particularly home equity, disappointing pension reserves and debt repayment (to some extent forced by new regulation in the mortgage market) will discourage people from drawing down capital for con-sumption purposes. Borrowing will also be more difficult in the coming years. In line with Holland and Portes (2012), we are raising the short-term elasticity of income both in the Netherlands (by 0.2) and in other countries. This results in a larger fiscal multiplier, and the first-year tax multiplier doubles as a consequence.

Total effects on economic growth and EMU balance
Figure 12 shows the various effects of fiscal consolidation on economic growth as calculated with NiGEM. In the standard model, the multiplier for the 2013-2017 period comes to 0.38. This version is adjusted for re-exports, so that the average standard multiplier comes to 0.70. If we consider the effects of
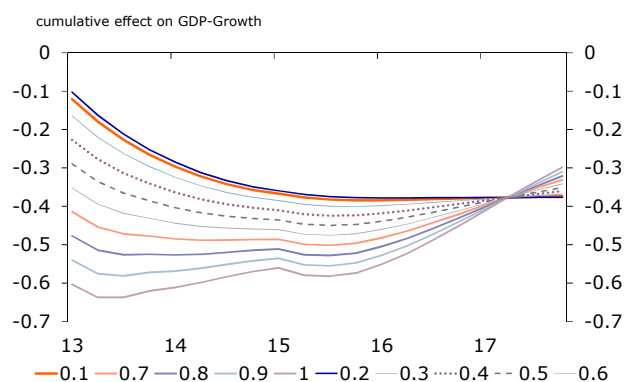
international fiscal consolidation, tight credit conditions and no monetary accommodation, this comes to 1.12 (figure 10). This is approximately 1¾ times the effect calculated by the CPB. This is, however, a smaller multiplier than that found by Holland and Portes (2012) during 2011-13. This is largely due to the difference in the planned fiscal consolidation by our main trading partners (in particular Germany). Blanchard and Leigh (2013) also find that in many countries the fiscal multipliers will probably be lower after 2011 than they were between 2009 and 2011.

Consequently, given the policy package, annual growth in this calculation will be nearly 0.7%-points lower (3.3%-points in five years) than without these effects. With a fiscal elasticity of 0.55 (which may well be a rather conservative estimate), this means that the budget balance in 2017 will be 1.8%-points less favourable than the estimate by the CPB. It also implies that fiscal consolidation over the 2013-2017 period will not have the desired effect: government debt will not fall by 0.7%-points as estimated by the CPB; it will actually rise by 4.2%-points. This is partly due to a rise in the budget deficit (1.8%-points) and partly because of the denominator effect (2.4%-points). By definition, lower growth will push up government debt as a percentage of GDP.

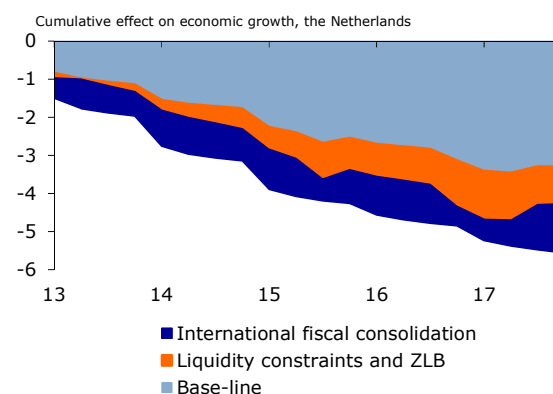**Do we have to consolidate quickly even if multipliers are large?**
Thus far, the discussion has been solely focused on the size of the fiscal multiplier. We admit that measuring it requires guesswork as economics is an inexact science. The message we are trying to convey is that the government can inflict extra and unnecessary damage to the Dutch economy by carrying out too much austerity in a weak macro environment. Surprisingly though, some do not even bother about the size of the multiplier and believe austerity is the only way forward because of a number of (ideological) reasons. Below we will provide the most famous ones and explain why we do not believe they are convincing enough to go for a 'cold shower' approach.

Figure 11: 1% tax increase and effects on economic growth for various short-term income elasticities

cumulative effect on GDP-Growth

— 0.1 — 0.7 — 0.8 — 0.9 — 1 — 0.2 ⋯ 0.3 ⋯ 0.4 -- 0.5 — 0.6

Source: NiGEM, Rabobank

Figure 12: Effects on economic growth

Cumulative effect on economic growth, the Netherlands

■ International fiscal consolidation
■ Liquidity constraints and ZLB
■ Base-line

Source: NiGEM, Rabobank

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Argument #1 – "If we don't do something quickly, we will fall into a debt crisis"

Dutch Politicians frequently announce in public that they should start reducing their deficits quickly because sovereign debt crisis is just around the corner. Statements such as "we must not go down the Greek road" and "the euro crisis must serve as a wake-up call" are often expressed in the media. In their view, complacency can result in a surge in government bond yields combined with rating downgrades.

Counterargument#1 – "Let's talk facts instead of spreading fear"

History has shown that a fiscally vulnerable country can drop out of the 'good equilibrium' (low and stable interest rates) into a 'bad equilibrium' (high and unstable interest rates) in a heartbeat. For that matter, any lack of resolve to restore order to the public finances can lead to an unwanted spike in interest rates and an ensuing debt crisis. In economics jargon this phenomenon is known as *multiple equilibria*. To prevent it from happening, governments must provide concrete and credible plans as to how they will achieve debt sustainability over a specific time frame. But our disagreement with the exit quickly camp is about the timing. In our view, all governments must not implement contractionary policy at the same speed to avoid a debt crisis. Put differently, the deficit hawks' fiscal medicine is the not the right policy for a country like the Netherlands that has a relatively strong fiscal position.

To show this, we have considered a number of variables that have served as useful early warning indicators in foreseeing fiscal vulnerabilities in the past. We decided to settle on 10 indicators in order to provide an unbiased measure of relative fiscal strength/weakness. Table 2 shows the list of early warning

Table 2: Fiscal Risk Heatmap (2012)

Early warning indicators	SE	NL	CH	FI	JP	US	GB	IT	IE	PT	GR	ES	FR	DE	AT	AU	BE	DK	CA	NZ
Current account balance (% GDP)	7.2	8.2	10.1	-1.6	1.6	-3.1	-3.3	-1.5	1.8	-2.9	-5.8	-2.0	-1.7	5.4	1.9	-4.1	-0.1	5.0	-3.4	-5.4
Gross public debt (% GDP)[1]	37	68	47	53	135	107	89	126	118	119	171	91	90	83	74	27	99	61	88	39
Primary budget balance (cycl. adj., % pot. GDP)	-1.3	-1.1	0.9	0.5	-8.1	-4.7	-2.8	4.7	-2.3	1.0	0.9	-2.2	-0.8	1.3	0.0	-2.4	1.1	-1.7	-2.6	-3.3
Gross financing needs (2yr ahead, % GDP)[2]	8	30	5	16	118	53	30	51	27	44	35	41	38	14	19	8	39	20	36	20
Unemployment rate (%)	7.5	5.2	3.4	7.6	4.5	8.2	8.1	10.6	14.8	15.5	23.8	24.9	10.1	5.2	4.3	5.2	7.4	5.6	7.3	6.6
Real GDP growth (3yr moving average)	3.7	0.8	1.9	2.1	2.0	2.2	0.8	0.1	0.3	-1.1	-5.5	-0.4	2.7	1.9	2.7	1.4	0.9	2.6	2.8	1.8
Gross external debt (% GDP)*	193	314	231	240	52	98	409	119	1037	231	206	169	187	167	199	86	289	189	68	85
Private sector credit (% GDP, 5yr change)**	9	8	4	15	-4	-25	-10	22	-2	26	27	12	9	-3	1	5	0	6	41	5
Real house prices (10yr change)[3]	49.3	-9.2	22.8	47.8	-25.6	-11.3	32.8	6.5	-16.7	-8.6	8.0	15.7	84.9	-8.3	44.7	74.7	77.8	16.6	99.3	62.6
Real effective exchannge rate (10yr change, %)[4]	-3	-6	8	-5	-19	-17	-25	7	2	-4	-5	2	1	-16	-1	82	2	3	57	44
Number of indicators in low risk category	4	5	5	5	6	5	2	3	3	2	2	0	0	9	4	5	2	3	2	3
Number of indicators in medium risk category	4	3	3	2	1	0	4	1	1	1	3	5	7	1	6	1	4	6	3	3
Number of indicators in high risk category	2	2	2	3	3	5	4	6	6	7	5	5	3	0	0	4	4	1	5	4

Legend †: High risk Medium risk Low risk

[1] For Japan net public debt is chosen.

[2] Maturing public debt plus budget deficit. Data for 2013 and 2014 are taken from the most recent *IMF Fiscal Monitor,* unless otherwise specified.

[3] Real house prices for 17 countries are retrieved from the Federal Reserve Bank of Dallas and are available unil 2012Q2. The missing data (Austria, Greece and Por were taken from BIS property statistics but are only available from 2000 till 2011. The GDP deflator has been used for calculating real prices.

[4] The trade-weighted exchange rate adjusted for changes in unit labour cost in the manufacturing sector.

*Data only available until 2012Q2 .

** Data only available until 2012Q2.

† High risk is top one-third percentile, medium risk is between 33rd to 66th percentile, low risk is bottom one-third percentile.

Source: OECD, IMF, BIS, World Bank, Federal Reserve, JEDH, Bloomberg, Reuters EcoWin

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indicators for a list of 20 advanced economies. Our simple fiscal risk heatmap has been turned into a 'traffic light' system to increase clarity. When the designated indicator is in the bottom 33rd percentile of the sample, we assign it a colour green (i.e. low risk). If the indicator is between the 33rd percentile and 66th percentile, the colour turns to yellow (i.e. medium risk). Once the indicator rises above the 66th percentile the cell colour will turn red (i.e. high risk).

When glancing through the table, a number of interesting observations catch the eye. First, we see that the Netherlands belongs to the group of countries with the most amount of indicators in the 'green zone'. The solid current account surplus position of the Netherlands suggests that its private sector net savings is more than sufficient to cover the government's net borrowing. The public debt-to-GDP ratio is still very much below most other advanced countries. The rate of unemployment, even though on an upward trend, is amongst the lowest. The correction in asset prices means that the banking sector is not susceptible to a domestic housing bubble. Obviously, larger falls in house prices may force the government to use its balance sheet once again to safeguard financial stability. Yet the housing correction has been gradual so far and non-performing loans have been manageable given higher capital buffers. Finally, the drop in the trade-weighted effective exchange (adjusted for inflation) points to a stronger competitiveness position of the Dutch export sector. Bearing in mind, however, that this is not very beneficial in the current weak external environment.

From the indicators flashing yellow, the gross financing needs of the government arguably demands the most attention as roughly half of Dutch public debt is in the hands of foreign investors. Their willingness in rolling over existing debt is crucial. So far there are no signs of falling demand for Dutch sovereign paper. The change in the private sector credit-to-GDP ratio has moved from the red to the yellow zone because of the ongoing deleveraging process. In time, we believe this indicator will move to the low risk category as balance sheet repair process continues. The cyclically-adjusted primary budget balance is higher than in some other countries such as Belgium, Finland, Germany and Switzerland. But again this indicator is moving towards the right direction.

Disturbingly enough, from the two indicators that are in the danger zone, one is real GDP growth. Evidently, the Dutch economic recovery has been far too disappointing during the post-crisis phase and this has concerned some rating agencies. The other indicator flashing red is the total (private and public) external debt of the Netherlands, which is undoubtedly very high (314% of GDP). However, we do take some comfort from the fact that the country's foreign asset position (454% of GDP in 2011) comfortably covers the total external debt.

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To be sure, the fiscal risk heatmap does not show that the Dutch sovereign is market-proof. At any point in time, waning market confidence owing to an adverse exogenous or endogenous shock can bring about a sovereign debt crisis. But the chances of such an event taking place is not high when one objectively looks at the country's fiscal metrics. Even if the Netherlands does not win the fiscal beauty pageant amongst the advanced countries, it certainly remains one of the most attractive nations for bond investors. Figure 13 shows that on most counts the Dutch fiscal metrics either scores better or is on par with the average of the advanced countries. And when compared to the average of the periphery countries (Greece, Ireland, Italy, Portugal and Spain), we see that the Netherlands is truly in a different league. Instead of spreading fear, the government can make sure that bond vigilantes are kept at bay through introduction of credible medium-term consolidation plans. This will not only help avoid multiple equilibria, but it will also give the recovery a chance to gather some steam.

Argument #2 – "When everyone is on a belt-tightening mode, the government must do the same"

It is often times mentioned by policymakers that the government should not be living beyond its means when households and businesses are tightening their belts. This is evident in the frequent appraisal of the *schwäbische Hausfrau* – southern Germany's thrifty Swabian housewife – by Angela Merkel. The German chancellor, and many of her supporters, argue that governments can learn from these women's frugal housekeeping and balanced budgeting. Such arguments are usually popular amongst electorates because most believe the government should not be going on a spending spree when everyone else is cutting down on expenses.

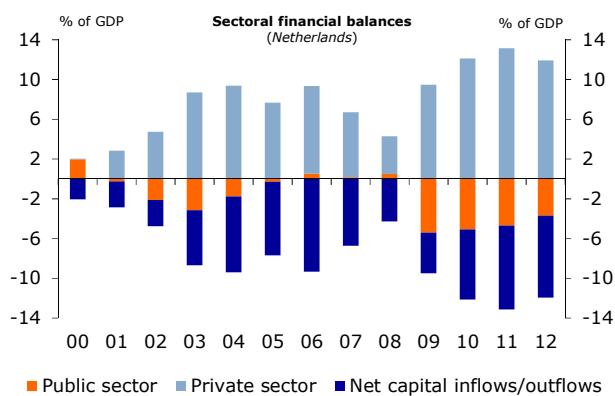### Counterargument #2 – "We can't all save at the same time"

The problem with the Swabian housewife analogy, while sounding fair, is that it cannot be imitated at the macro level. While a few households and businesses can save their excess income (e.g. to pay down debt). All residents in a country

Figure 13: Fiscal risks mapped

Note: Away from center signifies higher risks

— Netherlands — Advanced countries — GIIPS
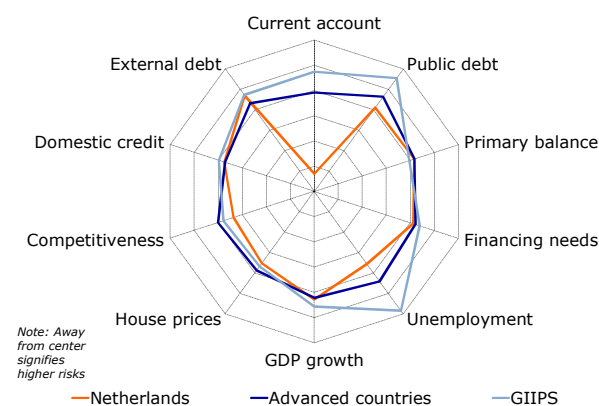
Source: Reuters EcoWin, IMF, Rabobank

Figure 14: Financial balances of all sectors

■ Public sector ■ Private sector ■ Net capital inflows/outflows

Source: IMF

cannot become net savers at the same time if foreigners do not demand more of their goods or services. This is commonly known as the paradox of thrift. The simplest way to understand this is to look at the sectoral financial balances (figure 14). Note that the balance between income and expenditure in the private, public and foreign sectors must *always* sum to zero by definition. The Netherlands has been running a current account surplus (i.e. net exporter of capital) for many years because the private sector's income exceeded its spending and this was not matched by the government's net borrowing. Since the crisis, private sector surplus has increased more due to deleveraging and higher precautionary savings. Given the negative feedback loop between private sector saving and economic activity, the Dutch government correctly judged that the expansion of its own debt (i.e. Keynesian policy) was a necessary evil to avoid a deep economic contraction. The releveraging of the public sector was all the more necessary amid the slow adjustment of the external balance.

Table 3: The estimated threshold that public debt-to-GDP ratio will start hurting growth

Studies	Sample	Threshold
Cecchetti et al. (2011)	18 advanced countries period: 1980-2010	85%
Checherita and Rother (2010)	12 advanced countries period: 1970-2010	90-100%
Kumar and Woo (2010)	38 advanced & emerging countries, period: 1970-2007	77-90%
Reinhart and Rogoff (2009)	44 advanced & emerging countries, period: 1790-2009	90%
Reinhart et al. (2012)	Advanced countries period: 1970-2010	90%

Source: Rabobank

So when the exit quickly camp recommends quick budget deficit reduction, they are assuming either a sharp drop in private sector surplus, a significant increase in exports or a combination of the two. As we mentioned previously, the weakness of the global economy amid synchronous exit of major industrialised economies from loose fiscal policies cautions against building a credible fiscal adjustment strategy primarily around an optimistic export growth path. Therefore, the private sector must be doing most of the heavy lifting. The consequence is a slowdown in deleveraging and a reduction in precautionary savings[4]. The former would not be a welcome development from a macro-economic point of view – as households must lower their debt to more sustainable levels – and the latter is out of the government's hands. Amid huge economic headwinds households and firms cannot be expected to significantly boost their spending. Thus, instead of solving the problem, the government will only add to it by exiting quicker than necessary.

Argument #3 – "Higher debt also reduces growth, so what's all the fuss about?"

An argument often put forward by deficit hawks is that higher public debt also weighs on growth (e.g. by crowding-out private investment) so we must not allow public debt to reach very high levels (even if fiscal multipliers are large).

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[4] Expecting a strong rise in private sector income is unthinkable in current economic circumstances.

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New evidence on the impact of high debt on growth shows an inverse relation-ship between public debt and subsequent growth. Estimates based on a range of techniques suggest that, on average, growth starts to fall when public debt-to-GDP ratio rises above 80-90% (table 3). The Netherlands is indeed getting very close to this threshold.

Figure 15: Debt doesn't always hurt growth

GDP growth when debt ratio is: ■ below 30% ■ Above 90%
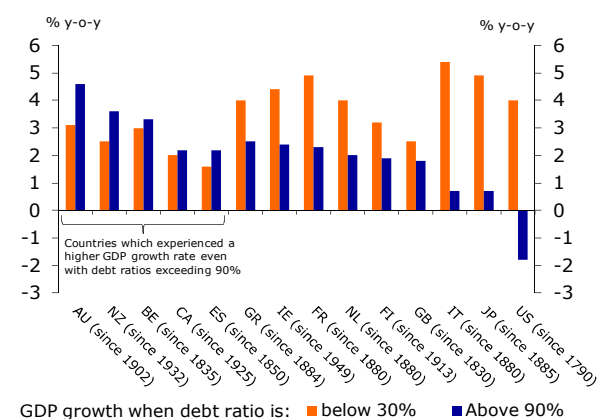
Source: Reinhart and Rogoff (2010)

Counterargument #3 – "This is not always the case, so let's not treat it as economic law"

The experiences of different countries shows that the issue is not as black and white as the deficit hawks claim. There have been episodes of higher GDP growth when debt ratios exceeded 90% (figure 15). Also, it is unclear whether the causality is unidirectional or whether this observation partly reflects the fact that countries with low growth are more likely to have encountered debt sustainability problems. It makes perfect sense to reason that lower economic growth actually pushes debt ratios upwards and not the other way around. Moreover, some scholars fail to find a 'tipping point'. For example, Sawhney and DiPietro (1994) and Panizza and Presbitero (2012) find no evidence that government debt slows growth even after controlling for a number of variables. That said, we are not arguing that the Dutch government can sustain any level of debt it so desires. There is clearly a level of debt that hurts growth due to its well-known distortionary effects. But this does not mean there is a uniform tipping point that the Dutch government must also avoid regardless of economic conditions.

Argument #4 – "We should not pass the bill to our children"

A frequent claim, which has more to do with morality than economics, is that we must not pass the bill to future generations. Fiscal profligacy has to be paid for at some point in time, and it would be the responsibility of the current genera-tion to take matters under control. This is especially relevant given the ageing problem of the Netherlands. A shrinking working population in the future means that people have to work more in order to repay government debt as well as pensions.

Counterargument #4 – "Public debt does not have to be repaid, it must be sustainable over the long-term"

Often times people confuse the debt of households and the public sector. An individual has a finite life, and the debt accumulated must be repaid during his/her lifetime. If parents assume irresponsible debt load and are unable to pay it off, it can be the case that their children would have to repay it later. But the

'life' of the public sector is infinite. Governments have never repaid their debt completely in the past and will not do so in the future. What matters is if the public debt is considered sustainable, which the IMF loosely defines as the absence of 'major corrections' in the primary budget balance in the future (Wyplosz, 2007). In other words, governments should not engage in a Ponzi-finance scheme – servicing existing debt by issuing additional debt to cover both interest payments and principal repayments. This is unsustainable and will be a matter of time before the country faces a debt crisis.

With this analysis in mind, we can argue that fiscal policy should be counter-cyclical. In 'good' times, governments must act as a brake on the overheating economy by tightening fiscal policy. And in 'bad times' they must provide some extra stimulus to the economy when demand conditions remain weak and mone-tary policy runs out of ammunition. This allows fiscal policy to remain neutral through the business cycle while being able to respond to averse shocks. The advantage of conducting fiscal policy in this manner is that productive produc-tion factors will not remain idle during downturns. Those in the exit quick camp regularly claim that accepting short-term pain now is the virtuous thing to do because the country gains in the long run. The example given is taking a not-so-tasty medicine in the hope of being cured. The problem with this metaphor is that the economic damage of frontloaded austerity can also have *long-term* costs (DeLong and Summers, 2012). The most important one is the increase in structural unemployment. When people are without work for an extended period, their skills and motivation decay and this makes it more likely that they will stay unemployed forever. Labour market economists call this phenomenon the hysteresis effect. Certainly, a period of prolonged economic weakness also lowers firms' propensity to invest and banks' willingness to lend to innovative firms. This will have negative long-run implications for the supply side of the economy. In sum, the government must not take actions that sacrifices the current generation and thereby lower potential output growth rate of the Netherlands. Not only will this do nothing to help the future generations, it actually lowers their economic well-being.

And to better prepare themselves for less favourable demographics, govern-ments can better reform their pension and health entitlements. For one, the retirement age can be raised given higher life expectancy. In addition, increasing the rate of immigration through a 'points' system like in Canada and Australia that aims to select migrants who have specialised skills can also help alleviate the problem. There is no shortage of high skilled labour in the developing countries that are willing to move to the Netherlands for better opportunities. The Dutch government can make immigration policy more flexible in order to reduce the country's ageing problem and boost economic growth.

Argument #5 – "A deal is a deal, period"
The agreement made with the European Commission (EC) as part of the

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Stability and Growth Pact (SGP) is that the Dutch government's deficit must fall below 3% of GDP in 2013. A number of coalition parties take this agreement seriously and will do everything in their power to realise it. This is considered all the more important in light of the tough negotiation strategy of the Netherlands with the Southern European countries in meeting their SGP goals. Leading by example is, therefore, believed to be indispensable for the country's credibility on the negotiating table.

Counterargument #5 – "An agreement is not broken if the flexibility incorporated in the law is used"

Reneging on promises is never a good feature for any government and the Netherlands must do everything in its power to meet the agreements made. However, there is some flexibility incorporated into the SGP that does allow the Dutch government to meet the 3% of GDP deficit target a bit later given severely weak macro conditions. Article 3(5) of Regulation (EC) 1467/97 of the Council of the European Union reads as follows:

"*If effective action has been taken in compliance with a recommendation under Article 126(7) TFEU and unexpected adverse economic events with major unfavourable consequences for government finances occur after the adoption of that recommendation, the Council may decide, on a recommendation from the Commission, to adopt a revised recommendation under Article 126(7) TFEU. The revised recommendation, taking into account the relevant factors referred to in Article 2(3) of this Regulation may, in particular, extend the deadline for the correction of the excessive deficit by one year as a rule. The Council shall assess the existence of unexpected adverse economic events with major unfavourable consequences for government finances against the economic forecasts in its recommendation. In the case of a severe economic downturn in the euro area or in the Union as a whole, the Council may also decide, on a recommendation from the Commission, to adopt a revised recommendation under Article 126(7) TFEU provided that this does not endanger fiscal sustainability in the medium term*".

This paragraph was added to the original regulation in 2005 in order to give more attention to the economic conditions in the determination of the deadline for removing an excessive deficit. The last sentence of the paragraph was added to provide additional flexibility when the SGP was further refined in response to the crisis.

Given the heavy cuts already announced for 2013, the Netherlands has responded to the recommendations to reduce the deficit. However, since no strict definition of the meaning of "unexpected adverse economic events" is provided, one cannot say with certainty that the negative economic outlook is sufficient reason for the EC to allow the Netherlands to reduce its deficit at a slower pace. The experience of Spain and Portugal illustrate, however, that the EC does show flexibility when economic performance significantly undershoots expectations (see Rabo Macro Comment 12/55).

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A handy checklist

The information provided above is vast and it may make sense for policymakers to have a short checklist to see when the time is ripe for speeding up the consolidating process. If all the boxes are ticked, as they are currently, then a 'getting it over quickly' approach is deemed unnecessary and undesirable.

- ✓ Households are liquidity constrained.
- ✓ Domestic demand is weak.
- ✓ Government bond yields have small room to fall.
- ✓ Structural and fiscal reforms that improve debt sustainability are being implemented.
- ✓ Monetary policy space is limited.
- ✓ Major trading partners are experiencing sluggish growth.
- ✓ Public finances are on a relatively strong footing.
- ✓ Fiscal rules provide flexibility when economic performance is disappointing.

Conclusion

One thing we can predict with 100% certainty is that the debate regarding the size of fiscal multipliers will not die anytime soon. As countries continue to restore fiscal sanity against a weak macroeconomic backdrop, economists will be passionately debating about the timing of fiscal austerity. Admittedly, many governments in the industrialised world are stuck between Scylla and Charybdis – the two famous sea monsters in Greek Mythology. If they are to cut their budget deficit too quickly to please the market, the rating agencies and the electorate, they risk choking the fragile recovery, if they do it too slowly, they risk falling into a debt crisis. This implies that fiscal consolidation is a fine balancing act and there is always a risk of getting it wrong.

The most pragmatic approach for countries with a strong fiscal position and low interest rates is to proceed with moderate adjustment to give recovery a chance to gather momentum. The Dutch government has instead opted for a 'cold shower' approach partly out of ideology and for a part due to the belief that the economy will in some magical way continue to grow amid private and public sector deleveraging and a weak external environment. We have offered qualitative as well as quantitative evidence that fiscal multipliers are higher than the government currently expects. This calls for a slowdown in the pace of consolidation. To make sure that market calm and sovereign ratings stay intact, the administration must announce a credible medium-term austerity package and move forward with structural reforms. The added benefit of this strategy is that short-term and long-term growth will not suffer as a result of reckless fiscal policymaking. It is high time for politicians to accept that the current fiscal plan is inflicting unnecessary damage to the Dutch economy, which leads to unnecessary destruction of much-needed jobs. Changing course of action makes the fiscal adjustment much more acceptable/tolerable for the electorate.

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