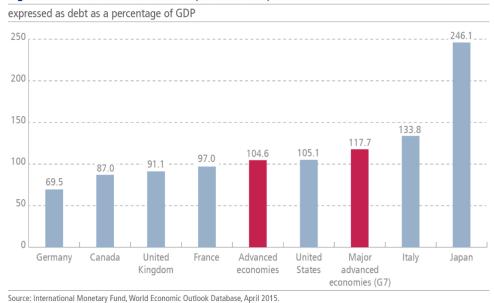


Fiscal devaluation – a route to more growth?

The global economy faces a number of economic challenges: Economic growth in most industrialized nations is slowing, the crisishit countries of Southern Europe are suffering the effects of low competiveness and, even in some G7 countries, sovereign debt has reached levels in excess of 100 percent of gross domestic product (GDP) (see figure 1). As domestic demand is weak, many industrialized nations are banking on increasing their exports in order to boost domestic production and employment. However, this is resulting in large current account imbalances worldwide.





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Current account imbalances are a challenge for the global economy...

These imbalances lead to considerable problems, particularly if they are persistent: Deficit countries see a rise in unemployment and foreign debt. Current account balances are not without risk for surplus countries either: The labor market's heavy reliance on exports leads to a rapid decline in employment if world trade collapses as a result of a global economic crisis. Gold and foreign currency inflows may lead to inflationary trends. Overseas assets may fall in value if the claims on the foreign company or country become worthless (the company or even the country in question becomes bankrupt) or if the foreign currency is sharply devalued (see Petersen 2010).

Due to the repercussions mentioned, current account imbalances can also have consequences for the entire global economy and therefore affect economies running a balanced current account. In this context, the risk of growing protectionism is particularly worthy of mention. Added to this is the threat of a global devaluation race, as some economies – particularly countries running current account deficits – could try to solve their current account problems by devaluing the domestic currency. If countries with export surpluses were also to respond by devaluing their currency in order to avert the threat of a slump in production and employment, this would lead to a global increase in money supply, as the increase in the supply of a country's own currency leads to the desired devaluation of the domestic currency. The global surplus of liquidity would therefore continue to grow, increasing the risk of speculative bubbles.

...and for economic policy

For highly advanced industrialized nations, the economic environment outlined results in a number of economic policy challenges. Three aspects are of particular importance for global economic trends:

- 1. In advanced industrialized nations, production and employment can no longer be boosted by increasing government debt further, as debt has already reached levels that are unsustainable in the long run.
- Expansive monetary policy is also reaching its limits, as central bank's interest rates in most advanced industrialized nations are already close to zero. In addition, the continual increase in money supply is leading to a growing risk of inflation and speculative bubbles.

3. The devaluation of the domestic currency may cause devaluation in the rest of the world, which may lead to a global devaluation race or currency war. Furthermore, countries that are a member of a currency union such as the euro are unable to devalue their currency.

So, given these restrictions, how can advanced industrialized nations increase production and employment? One tool that can be used to boost economic growth without increasing government debt, without expanding the money supply and without devaluing the domestic currency is fiscal devaluation.

The concept of fiscal devaluation

Under fiscal devaluation, ancillary wage costs – usually social security contributions – are cut so as to make domestic products more competitive through a reduction in unit labor costs. Conversely, taxes are raised in order to prevent government debt from rising. In economic policy practice, this increase affects consumption taxes, i.e. primarily value-added or sales taxes (see European Commission 2013: 9, Farhi, Gopinath and Itskhoki 2014: 1 and Bernoth, Burauel and Engler 2014: 916). This combination of a reduction in the social security contribution and an increase in VAT has consequences for the domestic labor market, export prospects and the domestic goods market.

On the labor market, the decline in the price of labor, i.e. in the gross wage, leads to stronger corporate demand for labor. The volume of employment therefore increases. As ancillary wage costs are lower, the net wage goes up (see annex). This increases disposable income and therefore purchasing power as well. On the goods market, the higher level of employment usually results in higher production and therefore in an increase in the supply of goods. To prevent an excess supply of goods, demand for goods must rise. There are essentially three levers for this:

- Falling labor costs mean falling production costs and therefore a fall in the price
 of goods. As a result, domestically produced goods and services can be offered at
 lower prices abroad. As consumers abroad are charged their VAT rate, the increase in domestic VAT is irrelevant to them (if the foreign country leaves its VAT
 unchanged and does not levy any additional taxes on products imported from the
 home country). The home country's exports increase as a result.
- 2. If a rise in employment coincides with a rise in the net wage, domestic purchasing power and therefore domestic demand for goods also increase.
- 3. The cut in social security contributions means a reduction in production costs. Companies can therefore offer any given quantity of a good at a lower price. Taken by itself, the reduction in prices associated with this leads to an increase in demand for goods.

At the same time, however, it is important to bear in mind that the increase in domestic VAT also makes consumer goods more expensive and therefore reduces domestic demand for goods. Overall, fiscal devaluation has two demand-boosting effects (an increase in incomes and a reduction in prices due to the cut in social security contributions) and one demand-reducing effect (an increase in prices due to the rise in the VAT rate) on the domestic goods market. From a theoretical perspective, it is uncertain which effects will predominate overall. If, however, employment growth is high and the price reductions resulting from the lower social security contributions are large, domestic demand for goods will increase. And even if the demand-reducing effect of the higher VAT rate predominates and domestic demand for goods therefore declines, this fall in demand may be offset by higher exports.

On balance, the overall effect of fiscal devaluation on aggregate demand for goods can therefore be described as follows: If export demand and employment growth are sufficiently high, the increases in demand predominate, i.e. there is also demand for the additional production. Fiscal devaluation therefore leads to higher economic growth and lower unemployment.

Fiscal devaluation in a global context

The positive effects of fiscal devaluation outlined so far apply when just one country uses this economic policy tool. However, the success of fiscal devaluation depends on global conditions, i.e. in particular on how export partners respond. If, for example, a country's main trading partners also apply this strategy, fiscal devaluation is less successful or even achieves nothing at all, as the improvement in international competitiveness sought through fiscal devaluation is eliminated by the economic policy responses abroad.

Therefore, an internationally coordinated approach is required if fiscal devaluation is to have the positive economic effects it is hoped it will achieve. Coordinated in the sense that only deficit countries apply this strategy and not countries with high export or current account surpluses. This would have a number of positive effects on the global economy:

- Deficit countries could improve their international competitiveness and thus boost their exports with the result that their current account deficits fall and they are able to reduce unemployment.
- This reduction in the current account deficit is achieved without manipulating the
 domestic currency, i.e. without any monetary policy measures that lead to the
 devaluation of the domestic currency. This reduces the risk of a global devaluation
 race.

- Internationally coordinated fiscal devaluation may help solve the competition crisis in the euro zone, where the tool of nominal devaluation is no longer available to the crisis-hit countries of Southern Europe.
- With this approach, surplus countries become less competitive, as a result of which their exports fall and imports rise. In the short term, this may lead to a decline in production and employment. However, surplus countries also benefit from the income growth in former deficit countries, where higher incomes push up demand for goods and therefore imports as well, with the result that the surplus countries' exports increase again. Thus, in the long run, fiscal devaluation may lead to more sustained global economic growth, without which surplus countries cannot continue to export either.

Which countries should use fiscal devaluation?

If fiscal devaluation is intended to promote growth and employment while at the same time helping to reduce global current account imbalances, there are several general conditions that need to be considered:

- Fiscal devaluation is particularly suitable for countries with high wage taxation
 and low consumption taxation, as it is here that a reduction in social security
 contributions is likely to result in the highest employment growth. Furthermore,
 as consumption taxation is low, a rise in the VAT rate is likely to cause a moderate
 reduction in domestic consumer demand.
- The main lever for the positive effects of fiscal devaluation on employment is the increase in exports, which is likely to happen if the home country has a high export ratio. This is mainly the case for small and open economies, meaning that fiscal devaluation has the effect of boosting employment primarily in small countries. Besides the export ratio, the structure of the export goods is also relevant. If the home country generates its export revenues primarily in the tourism sector, for example, and that sector is not exempt from the VAT increase, exports will not rise as hoped.
- Labor intensity in production also plays an important role in how successful fiscal
 devaluation can be. If labor intensity is high, the reduction in the social security
 contribution leads to a relatively large decline in production costs. This results in
 both a relatively large increase in exports and a relatively large increase in employment and therefore in domestic purchasing power and consumer demand
 as well. However, if production by domestic businesses is very capital intensive,
 a reduction in labor costs only leads to a small improvement in international competitiveness.

Fiscal devaluation can only reduce global current account imbalances if deficit
countries use this tool and thus reduce their current account deficits. If, on the
other hand, countries with export surpluses were to use fiscal devaluation, this
would increase their exports and push up existing current account surpluses further.

Based on these considerations, it is possible to identify several countries for which fiscal devaluation as part of an internationally coordinated overall strategy is a useful tool and countries that should forgo this tool. The latter include Germany and Japan, as both countries have been running current account surpluses for years (see figure 2). Fiscal devaluation is also likely to have limited effects on growth and employment in the U.S., as large economies such as the U.S. sell only a relatively small proportion of their domestic production abroad.

For countries with current account deficits, fiscal devaluation is generally a way to achieve an improvement in international competitiveness and increase exports. It may be a useful measure in the case of "chronic trade deficits" in particular (see Bernoth, Burauel and Engler 2014: 922), as a current account deficit lasting many years is an indication of the country's long-enduring competitive weakness. For this reason, fiscal devaluation would also be a useful tool for Italy: Although the country has been running small current account surpluses since 2013, these are attributable primarily to falling imports and less to rising exports. In 2010 and 2011, for example, the lack of international competitiveness was reflected in current account deficits of 3.5 percent and 3.1 percent of GDP, respectively (see figure 2).

as a percentage of GDP percent -6 2009 2010 2011 2012 2000 2001 2002 2003 2004 2005 2006 2007 2008 2013 2014 Germany Italy France Canada Japan United Kingdom United States Source: International Monetary Fund, World Economic Outlook Database, April 2015

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Figure 2: Current account balances of the G7 countries

As already mentioned, fiscal devaluation is particularly suitable for countries with high wage taxation and low consumption taxation. The tax burden can be measured using the implicit tax rate, which is calculated by Eurostat for the EU countries. This concept measures the effective, or actual, burden on factors of production and economic functions from taxes and government levies.

Figure 3: Implicit tax rates on labor and consumption in 2012 in selected EU member states. Information in brackets: The country's ranking among all 28 EU countries (sorted based on the ranking of the implicit tax rate on labor)

Country	Implicit tax r	Implicit tax rate on labor		Implicit tax rate on consumption	
Belgium	42.8%	(1st)	21.1%	(14th)	
Italy	42.8%	(2nd)	17.7%	(22th)	
France	39.5%	(6th)	19.8%	(17th)	
Greece	38.0%	(10th)	16.2%	(27th)	
Germany	37.8%	(11th)	19.8%	(16th)	
Denmark	34.4%	(14th)	30.9%	(1st)	
Spain	33.5%	(16th)	14.0%	(28th)	
Ireland	28.7%	(24th)	21.9%	(11th)	
Portugal	25.4%	(25th)	18.1%	(21st)	
United Kingdom	25.2%	(26th)	19.0%	(19th)	
EU-28 average (weighted)	36.	36.1%		19.9%	
ource: Eurostat 2014: 255 f.					

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Figure 3 shows the tax burden from government levies for selected countries. Looking at the data for 2012, fiscal devaluation is a useful tool primarily for the crisis-hit countries of Southern Europe, and first and foremost for Italy: In 2012, the implicit tax rate on consumption was 17.7 percent (ranking only 22nd among all 28 EU countries with regard to the amount of the tax burden), while the implicit tax rate on labor was 42.8 percent (the highest burden of all the EU countries after Belgium). The picture is similar for Spain, where consumption taxation is 14 percent (28th and therefore last in the EU ranking) and the burden on labor 33.5 percent (16th).

Economic policy implications for industrialized nations

In light of the high level of government debt in most developed economies, fiscal devaluation is an attractive economic policy tool, as it is a budget-neutral measure and therefore prevents public debt from rising. It also achieves an improvement in

international competitiveness without any nominal wage reductions, which experience shows are difficult to implement. Finally, for countries with fixed exchange rates or a currency union, fiscal devaluation is a replacement for the nominal devaluation no longer at their disposal. There have been a number of fiscal devaluations in the euro zone in recent years, including in Ireland (2002), Germany (2007), Spain and Finland (2010), the Netherlands (2012) and France (2014) (see Bernoth, Burauel and Engler 2014: 918).

However, for fiscal devaluation in one country to be able to boost production and employment, countries with current account surpluses must forgo this tool because if they also use fiscal devaluation, the relative competitiveness of countries around the world will not change at all. There is therefore a requirement for international solidarity and an internationally coordinated economic policy. The G7 and G20 are ideal institutions for coordinating economic policy.

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Annex: Labor market effects of falling social security contributions

Assuming normal labor supply and labor demand behavior on a labor market, a rise in the gross wage (w^{gr} .) leads to a fall in corporate demand for labor and an increase in private household labor supply. If the government levies social security contributions, there is a net wage (w^{net}) that employees receive as well as the gross wage that

employers have to pay. If, to simplify the analysis, the social security contribution is assumed to be the only deduction from the gross wage and denoted here by τ , the relationship is as follows: $w^{net} = w^{gr.} - \tau \cdot w^{gr.} = (1 - \tau) \cdot w^{gr.}$. In this case, corporate demand for labor still depends on the gross wage, but household labor supply is now determined by the amount of the net wage. In a wage/employment diagram (see figure 4), the existence of a social security contribution results in one labor demand curve dependent on the gross wage ($L^d(w^{gr.})$) and a second labor demand curve dependent on the net wage is constructed by moving the demand curve dependent on the gross wage to the wage/employment diagram's origin. The point of intersection with the employment axis is the same for both labor demand curves.

The labor market equilibrium before fiscal devaluation is given by the point of intersection of the labor supply curve dependent on the net wage ($L^s(w^{net})$) and the labor demand curve dependent on the net wage ($L^d(w^{net})_{old}$). This equilibrium is marked by equilibrium employment (L_{old}) and the related net wage (w^{net}_{old}) and gross wage (w^{gr}_{old}).

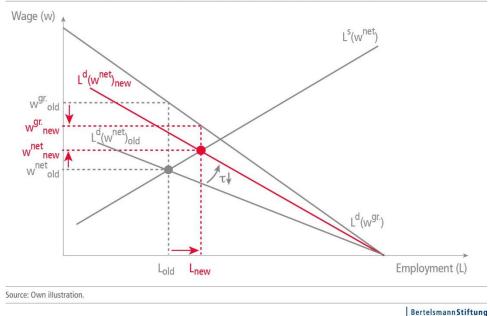


Figure 4: Labor market effects of a cut in the social security contribution $(\tau \!\!\downarrow)$

If, under fiscal devaluation, the social security contribution is cut $(\tau \downarrow)$, the labor demand curve dependent on the net wage once again moves away from the origin slightly. The new labor market equilibrium is marked by higher employment ($L_{\text{new}} > L_{\text{old}}$), a higher net wage and a lower gross wage. This means a higher net income for employees and lower labor costs, and therefore lower production costs, for businesses.

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