ECONOMIC RESEARCH & CORPORATE DEVELOPMENT

Working Paper 141

June 28, 2010

} MACROECONOMICS } FINANCIAL MARKETS } ECONOMIC POLICY } SECTORS

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Eurozone debt crisis: Impact on the economy

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EUROZONE DEBT CRISIS - IMPACT ON THE ECONOMY

Economic activity in the euro area was slow to recover in the winter months of 2009/2010. And now the debt crisis has struck, to boot. Will that necessarily put paid to the recovery? As far as George Soros is concerned "Europe faces almost inevitable recession next year and years of stagnation as policymakers' response to the euro zone crisis caused a downward spiral". However, this skeptical view of things flies in the face of the current trend. EMU economic growth very likely accelerated considerably in the second quarter of this year. Business expectations in the corporate sector are predominantly upbeat.

This paper will attempt to identify the repercussions of the debt crisis on the basis of the individual transmission channels. However, not all transmission channels are generating a negative impact on the economy. One example is the depreciation of the euro set in train by the debt crisis.

Sharp depreciation in euro since early 2010

In our view essentially the following potential transmission channels exist:

- State spending cuts reduce aggregate demand.
- Depreciation of the euro boosts the price competitiveness of the corporate sector, thereby increasing export demand. However, mounting inflation eats into purchasing power.
- Negative confidence effects could dampen expectations in the corporate sector and have a negative impact on the propensity to invest.
- Negative asset effects such as falling equity prices could make consumers less inclined to spend and weaken investment activity.
- Negative effects due to writedowns on government paper could lead to more restrictive lending by banks to the corporate sector and private households.

In our opinion the three last transmission channels have so far not been particularly relevant for the EMU economy. Business expectations are positive in most EMU countries, there has not been any major slide on important stock markets and there are no signs that banks are generally more restrictive in their lending to companies and private individuals in the euro area. Therefore, the issue is essentially how the spending cuts and the euro depreciation will impinge on the EMU economy.

Assessment of the impact of the state's consolidation policy on the economy is rendered difficult by the fact that, although the EMU countries have submitted plans to cap their deficits at 3% of GDP and less, in some cases they have failed to clearly define and quantify the measures they intend to implement to reduce their budget deficits. In most EMU economies the consolidation programs will probably amount to 0 to 0.5% of GDP this year. In Spain and Portugal the scale of the consolidation measures will come to 1½% to 2% of GDP in 2010, in Ireland it will be 4% and in Greece it will be over the 8% mark. All told we arrive at a consolidation volume in the EMU in 2010 of 0.6 to 0.7% of GDP. In some economies, such as Germany, the austerity programs are not due to begin until 2011. Even though the programs in Germany, France and Italy are fairly limited in extent, the aggregate volume across EMU will probably be much higher in 2011 than in 2010. We put the volume of consolidation measures in EMU in 2011 at 1 to 1.2% of GDP.

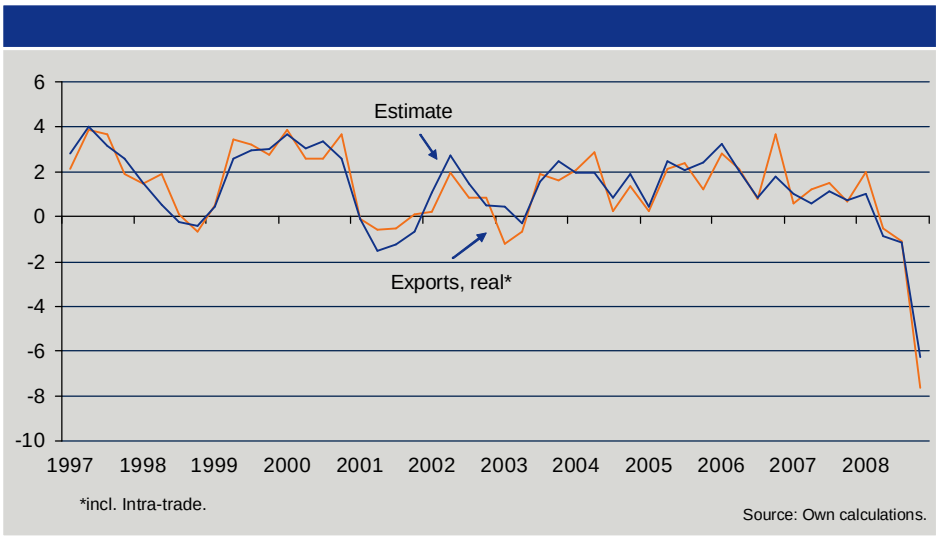
So, what impact will these state-induced contraints have on gross domestic product? What we are looking for is the multiplier that tells us by how much GDP will change if state spending is cut by a given amount or taxes are increased by a certain percentage. A plethora of empirical studies have been carried out on this - most of them based on econometric models. In its annual expertise for 2009/2010 the "Sachverständigenrat" (panel of experts on macroeconomic developments) recently subjected state-spending multipliers in the euro area to close scrutiny. Most of the studies arrive at the conclusion that the spending multipliers are well into positive territory, but lower than one. If anything, even smaller multiplier effects are ascribed to revenue multipliers. We consider it realistic to assume fiscal multipliers of 0.5 to 1.

On the basis of our estimate of the volume of consolidation measures and the size of the fiscal multipliers we can derive the effect on GDP: in 2010 the consolidation measures will likely reduce EMU GDP by 0.3 to 0.7% and in 2011 by 0.5 to 1.2%.

Since the beginning of the Greek debt crisis the trade-weighted exchange rate of the euro has plunged around 12% and since the end of last year the euro has depreciated by roughly 10%. In real terms a similar depreciation has taken place, as inflation rates in and outside the euro area have not differed appreciably in this brief period. In the following sections we explore the quantitative impact of a ten-percent real depreciation of the euro on the EMU economy. This of course assumes the euro's value stays low.

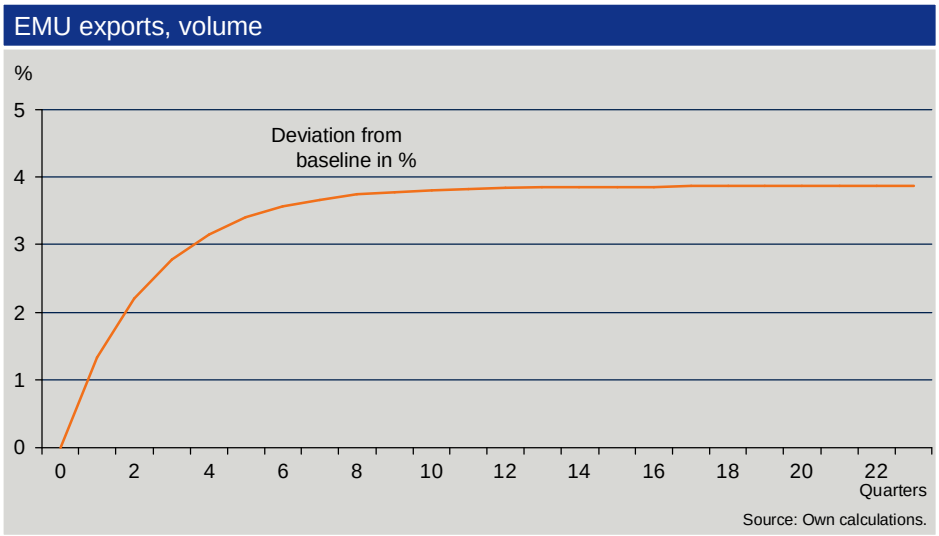
The euro's depreciation increases the corporate sector's international competitiveness in terms of price. Therefore, as a first step, we need to look into the impact on real exports. The determinants in our econometric approach are real global trade and the real trade-weighted exchange rate of the euro. The estimate using seasonally-adjusted quarterly rates of change is based on the period from Q1 of 1997 to Q4 of 2008. The beginning of the estimate period was set prior to the launch of monetary union in order to obtain a longer period of observation. In 1997 and 1998 exchange rates across the euro area were already largely stable. With this approach about 85% of the fluctuations in the rates of change in exports can be explained. As can be seen in the chart below, the estimate line is fairly close to the line for actual development.

Econometric analysis: EMU exports



The long-term elasticity of EMU exports with respect to global trade is 0.8%, the long-term elasticity with respect to the external value 0.39%. It is no surprise that in the longer term EMU exports are expanding more moderately than global trade given that the emerging markets, in the process of their integration into the global economy, are achieving disproportionately high rates of increase in their foreign trade. The following chart shows the effects of a sustained 10% depreciation of the euro on export volumes over time.

Impact of sustained 10% depreciation of the euro



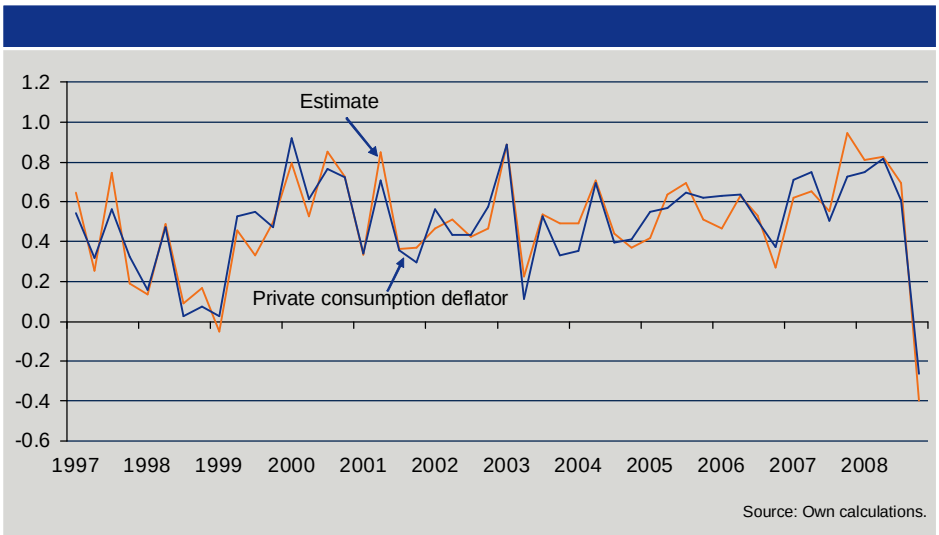
After four quarters depreciation results in an additional export volume of around 3% and after twelve quarters ends up adding 3.9% to total exports. With a share of exports (incl. intra trade) in EMU GDP of around 36% we obtain (ceteris paribus) a contribution to GDP growth of 1.1 percentage points after one year and 1.4 percentage points after two to three years.

We have furthermore calculated what effect real depreciation has on the volume of imports. Depreciation should tend to reduce imports, as domestic goods are then relatively cheaper than goods imported from outside the euro area. As an appreciable share of imported goods are commodities and specialized primary products, we can only expect substitution by domestic goods on a moderate scale. This is borne out by the estimates. After two to three years a 10% depreciation of the euro reduces real imports by 0.5%. This means the resultant contribution to GDP growth is at best 0.2 percentage points.

However, the effects of depreciation are not only positive. A fall in a currency's external value increases the price of imports and, as a result, pushes domestic prices upward. There is a stronger rise in consumer prices, which eats into consumers' purchasing power.

In our econometric approach consumer price inflation is determined by the increase in the cost of domestic output and the increase in import prices. According to our estimate a 1% rise in import prices results in a 0.13% increase in consumer prices in the longer term.

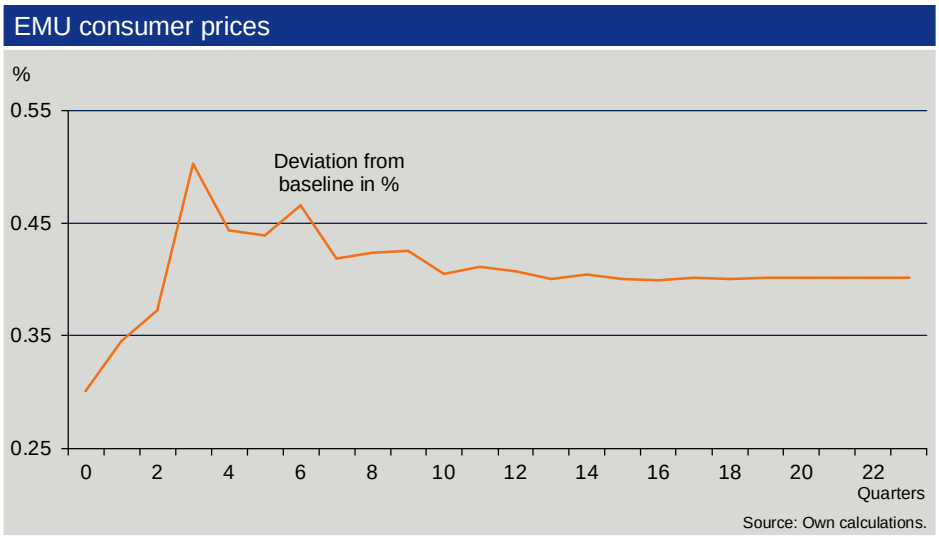
Econometric analysis: EMU inflation



In our model import prices in turn are determined by the external value of the euro and commodity prices. According to this approach a 1% depreciation of the euro results in an increase in import prices of 0.3% in the longer run.

We have now summarized the two estimated elasticities - that of consumer prices with respect to import prices and that of import prices with respect to the exchange rate - in order to assess the impact of a 10% euro depreciation on consumer prices. The results are presented in the following chart.

Impact of sustained 10% depreciation of the euro



In the course of one year a 10% fall in the external value leads (ceteris paribus) to a 0.5% higher level of consumer prices and after around two years there remains an increase in prices of 0.4%. The purchasing power of private households is reduced to the same extent. If the savings rate stays unchanged, this produces a dampening effect on real private consumption of 0.4%. With private consumption accounting for a share of GDP of roughly 60% this results in a negative contribution to GDP growth of around 0.25 percentage points.

While the transmission channels of currency depreciation to the real economy considered below admittedly fail to cover all potential effects, we believe the most important mechanisms have been assessed.

Impact of a sustained 10% depreciation of the euro on the real economy

	after 4 quarters	after 8-12 quarters
Real exports*	+1.1%	+1.4%
Real imports*	-0.2%	-0.2%
Real private consumption*	-0.3%	-0.25%
Real GDP		
Gross effect**	+1.0%	+1.35%
Net effect**	+0.6% to +0.7%	+0.8% to +0.9%

* Effect as a proportion of GDP.
** Gross effect: without deducting demand reflected in additional imports.
Net effect: after deducting demand reflected in additional imports.

To sum up - a 10% real depreciation increases real exports by 1.4% in terms of GDP after two to three years (1.1% after one year), lowers real imports by 0.2% in terms of GDP and reduces real consumption (assuming the savings rate stays unchanged) by 0.25% in terms of GDP (0.3% after one year). This adds up to a boost to aggregatedemand of 1.0% of GDP after one year and 1.3 to 1.4% of GDP after two to three years. However, as some of this additional demand is reflected in additional imports, we estimate that after four quarters the 10% depreciation of the euro will increase gross domestic production by 0.6 to 0.7% and by 0.8 to 0.9% after two to three years.

So, while on the downside the austerity packages will shave 0.5 to 1.2% off GDP, on the upside depreciation will boost GDP by 0.8 to 0.9%. All told, therefore, the effects could even cancel each other out (-0.4% to +0.4% of GDP), at least as long as the euro's exchange rate stays lower. This means that so far economic recovery is not likely to come to a halt in the wake of the debt crisis. We are expecting the euro area economy to grow by 1.5% in 2010 and 1.7% in 2011.

Euro area: Economic indicators and forecasts*

		2009				2010				2011						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2009p	2010f	2011f
GDP real		-2.5	-0.1	0.4	0.1	0.2	*0.8*	*0.5*	*0.5*	*0.3*	*0.3*	*0.4*	*0.4*	-4.1	*1.5*	*1.7*
Private consumption		-0.6	0.1	-0.2	*0.2*	-0.1	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.3*	*0.3*	*-1.2*	*0.3*	*0.9*
Government spending		0.8	0.7	0.7	*-0.2*	0.2	*0.3*	*0.2*	*0.2*	*-0.2*	*-0.1*	*-0.1*	*0.0*	*2.7*	*0.9*	*0.0*
Investment		-5.3	-1.5	-1.1	*-1.2*	-1.2	*0.6*	*0.6*	*0.6*	*0.5*	*0.6*	*0.6*	*0.6*	*-10.8*	*-2.2*	*2.3*
Exports		-8.4	-1.1	2.9	*1.8*	2.1	*2.0*	*1.5*	*1.6*	*1.8*	*1.6*	*1.5*	*1.5*	*-13.2*	*7.5*	*6.7*
Imports		-8.0	-2.8	2.8	*1.2*	3.8	*1.2*	*0.9*	*0.9*	*1.2*	*1.2*	*1.3*	*1.3*	*-11.9*	*7.0*	*4.6*
Unemployment rate	%	8.8	9.3	9.7	*9.8*	10.0	*10.1*	*10.1*	*10.0*	*10.0*	*10.0*	*9.9*	*9.8*	*9.4*	*10.0*	*9.9*
Consumer prices	y-o-y, nsa	1.0	0.2	-0.4	*0.4*	1.1	*1.5*	*1.8*	*1.9*	*2.0*	*1.8*	*1.8*	*1.9*	*0.3*	*1.5*	*1.9*

*) quarterly values: percentage change over previous period, seasonally adjusted, except where noted; annual GDP not adjusted; foreign trade incl. intra-trade. f = forecast.

These assessments are, as always, subject to the disclaimer provided below.

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