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Abstract

This paper compares the depth and length of the recent crisis with the Great Depression in the nineteen thirties. It claims that economic policy played a crucial role in shortening and curtailing the recent crisis. We analyze which policies were applied during the Recent Crisis and which measures worked. We know that policies relying on large infrastructure projects inherently involve an implementation lag. These lags have been very high in the Recent Crisis and some expenditure planned will maybe never be spent. We therefore suggest implementing a leakage rate for government expenditure programs which represents the part of intended public expenditures not spent in the first twelve months after the program is set into action. It might be higher than the savings rate out of a tax cut. Furthermore, exit strategies should ideally cut expenditure to the same extent as the increase in government spending during the crisis had been, so that sooner or later tax rates and debt rates may return to pre crisis levels. The core of the Keynesian policy recommendation is to raise expenditure in the crisis but to achieve a balanced budget over a full cycle. If expenditure is not cut after the crisis tax and/or debt rates will increase after each downturn and the basis for any Keynesian policy in the next crisis will be eroded. This does not preclude, that it might be useful in the exit phase to change the tax structure in order to lower taxes on labor, specifically for low wages, while increasing taxes on financial transactions, carbon emissions, capital gains or property. This would lower unemployment and boost demand in economies with tendencies to under consume.

JEL No: E20, E30, E32, E44, E60, G18, G28

Keywords: financial crisis, business cycle, stabilization policy, resilience

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Post Crisis Policy: Some Reflections of a Keynesian Economist

1. Outline and focus

There is an increasing number of analyses about how the current financial crisis came about. They discuss the role of (i) macroeconomic imbalances, (ii) microeconomic causes (incentives etc.) and (iii) the contribution of insufficient or impropriate regulation of an overly "innovative" financial sector. The focus of this paper is to present stylized facts about the current crisis, the role of economic policy and what we could learn from policies applied. We make the point that a future oriented stabilization policy should rely on a broader set of measures to make economies more resilient ex ante, and to provide the necessary conditions for making anti-crisis policy feasible, if the next crisis should occur.

Section 2 compares the depth of the Current Crisis with the Great Depression (following *Aiginger*, 2010), using seven indicators on economic activity. The evidence shows that the Current Crisis (though it was the deepest since World War II and the first period in which world GDP declined in absolute terms), but by far did not reach the dimensions of the Great Depression. We then describe the speed of decline at the start and its length.[1] Section 3 sketches the reaction of fiscal and monetary policy and makes the point that the policy reactions were very different. This time both monetary and fiscal policies were applied courageously and they worked, together with strategies to guarantee savings and to recapitalize banks.

Section 4 discusses experiences with policy measures, specifically (i) the implementation lags of infrastructure programs, (ii) the striking success of incentive programs with caps and time slots. We furthermore discuss the structurally conservative approach of policies implemented and whether a focus on intangible programs could be advisable. Section 5 presents a larger choice of measures which can ex ante increase the resilience of economies, which is particularly important given that the policies applied after a crisis has started are limited by their implementation speed and structural content. Section 6 assesses the effect of the policy reaction to the crisis and how it can be seen as a triumph for the Keynesian approach of an anti-cyclical policy. Furthermore it outlines what a Keynesian approach to the crisis means for the exit period, specifically that (i) increasing taxes and/or (ii) foregoing to eliminate deficits, will undermine the ability for anti cyclical policy in the next crisis. Sector 7 concludes.

[1] The crisis is not yet over in several countries and repercussions will be felt for a long period (unemployment, fiscal deficits etc.). Disequilibria between countries will exist for a long time and influence the exit strategies. Since, however, world economic output is expanding by more than 3% in 2010, it seems sensible to take stock about the length and depth of the crisis.

2. Comparing the Recent Crisis to the Great depression

The overall result

There has been numerous and controversial assertions about the relative scope of the two crises, maybe championed by *Romer* (2009) on the one side who claimed that the recent crisis is dwarfed by the Great Depression and *Eichengreen – O'Rourke* (2009) on the other side who provided real time data (with monthly updates) indicating that the Recent Crisis had been or was as deep as the Great Depression.[2] If the Recent Crisis is over – as currently indicated by the mainstream predictions, at least for world GDP – the result is clear-cut: the Recent Crisis proved to be much smaller. *Aiginger* (2010) presents evidence as to the depth of the two crises using seven activity indicators. The difference between the maximum of each activity indicator before 2009 and its lowest point during the crisis is used as measure.

There are especially large differences between the two crises for GDP growth, employment and unemployment. Considerable differences for exports (on a monthly or quarterly basis) can be shown, for the stock market the difference is large for the US, for monthly or daily data (not for annual data and not for the unweighted average of the ten countries). The smallest difference was for manufacturing output in real terms. There had been a severe deflation in the thirties, this time round there were only a few but short episodes where the overall price level declined.

Table 1: Stylized facts: activity indicators
Unweighted average over ten industrialized countries

	Great Depression	Recent Crisis	
	1932/1929	2009/ peak 2007/2008	Trough 2009/ peak 2007/2008
	Annual data		Quarterly data
	Percentage change		
GDP, real[1])	-10.0	-4.0	-5.4
Manufacturing	-23.2	-20.2	-23.0
Exports	-58.5	-20.9	-24.6
Stock market	-55.4	-53.4	-53.6
Employment	-17.3	-2.5	-1.6
Unemployment rate 1932 and 2010	19.6	9.2	
Unemployment rate; change[2])	13.2	3.1	2.0
Inflation (CPI)	-12.8	1.0	-0.1

[1]) At PPP. – [2]) Absolute difference 1929 to 1932 vs. 2008 to 2010. Ten industrialized countries: Austria, Germany, Belgium, Spain, France, Finland, Sweden, United Kingdom, USA, Japan.
Source: *Aiginger* (2010).

[2] *Eichengreen and O'Rourke* used data mainly on industrial production, world trade and the stock market.

The negative surprise

However, a more detailed analysis shows that the speed of the downturn in the first three or four quarters was, for many indicators, specifically for exports and industrial production, stronger or at least rather similar to the Great Depression: This, together with the current level of globalization, supports the view that this crisis had the potential to develop into a Great Depression. The speed of decline in this crisis was never as fast as in the Great Depression for employment, unemployment and GDP.

The share of the decline in the first year, relative to the overall decline for the prolonged crisis, was relatively small in the Great Depression. By contrast, this time most, if not all, of the decline happened in the first nine months. The larger overall drop in activity in the Great Depression was the result of its length. The downturn of the stock market, of world trade, and finally the bank failures happened in different waves over years rather than simultaneously.

Therefore the Great Depression lasted nearly a decade and ended only in the build-up period of war or during WWII. The Recent Crisis lasted only 1½ years, again if you assume that it is over in 2010. Currently growth is not stable and self enforcing, but positive indicators by far outweigh negative ones, even if new bubbles in assets and currency should reemerge.

Table 2: Speed of downturn in the first three quarters

	Great Depression			Recent Crisis	
	Overall drop 1929/1932	1930/1929	First three quarters	Overall drop 2009/2008	First three quarters
	Percentage change				
GDP, real[1])	-10.0	-7.0		-4.0	-3.6
Manufacturing; quarterly data	-23.2	-6.2	-11.9	-20.2	-19.4
Manufacturing; monthly data			-16.0		-17.3
Exports; quarterly data	-58.5	-17.3	-13.4 [2])	-20.9	-25.1
Exports; monthly data			-16.9 [2])		-27.2
Stock market	-55.4	-27.1	-19.7	-53.4	-19.4
Employment	-17.3	-4.8		-2.5	-1.1
Unemployment rate 1932, 1930 and 2010	19.6	10.2		9.2	
Unemployment rate, change	13.2	2.6		3.1	0.5
Inflation (CPI)	-12.8	-2.2		1.0	-0.1

[1]) At PPP. – [2]) *Eichengreen – O'Rourke* (trade). Ten industrialized countries: Austria, Germany, Belgium, Spain, France, Finland, Sweden, United Kingdom, USA, Japan
Source: *Aiginger* (2010).

3. The positive surprise: economic policy was applied and worked

There is strong and growing evidence that the main factor for the difference in the length between the crises was economic policy. Economic policy, specifically monetary policy and

fiscal policy, re-acted quite differently in each crisis. This was partly due to lessons learned from the Great Depression itself. During the Great Depression fiscal policy was restrictive, at least during the first three years. It tried to keep budgets balanced and counteracted the automatic stabilizers by increasing tariffs and taxes and by reducing expenditure. In the Recent Crisis automatic stabilizers were a priori larger. Their effect was amplified by stimulus programs. Bank failures and the breakdown of the credit market were combated through the use of guarantees, recapitalization or nationalization. Furthermore, all these measures were implemented expeditiously and to a certain extent with coordination at an international level. The same difference holds true for monetary policy. In 1929 interest rates were first increased, and then cautiously reduced. Severe deflation turned the lower nominal rates into high real rates. Money supply declined over several years for many countries (at least in nominal terms). This time monetary policy slashed interest rates towards zero and engaged in traditional and innovative increases in money supply. Some institutional factors helped. There was no gold standard to limit money supply and fewer national currencies to defend due to European monetary integration. There was more consensus among economists and more international coordination due to the G7, G20, the European Union, the IMF, and the World Bank.

Table 3: Policy indicators

	Great Depression	Recent Crisis	
	1929/1932	2008/2009	
Money supply (M1)	-7.6	12.1	
Discount rate; level start	5.6	4.0	
Discount rate; 1 year after start	4.0	0.6	1)
Discount rate; 2 years after start	4.5		
Discount rate nominal; absolute change	-1.4	-3.2	2)
Discount rate real; absolute change	5.4	-0.7	2)
Fiscal balance; level start	0.7	-1.7	
Fiscal balance; 1 year after start	-0.5	-6.4	
Fiscal balance; 2 years after start	-0.8	-7.8	
Debt/GDP; level start	57.3	68.6	
Debt/GDP; 1 year after start	58.9	78.6	
Debt/GDP; 2 years after start	65.6	86.3	
Customs/GDP; level start	1.8	0.1	
Customs/GDP; 1 year after start	1.8		
Customs/GDP; 2 years after start	2.1		

[1]) 1Q2009 -3Q2009. – [2]) 1Q2009-3Q2009/1Q2008-3Q2008. Ten industrialized countries: Austria, Germany, Belgium, Spain, France, Finland, Sweden, United Kingdom, USA, Japan
Source: *Aiginger* (2010).

4. What worked, what did not work, what was not done

While it seems uncontroversial that economic policy worked overall, specific elements of the stimulus packages did lead to both positive and negative experiences. It is far too early to have definite, quantitative evidence based on state of the art econometrics to prove how effective economic policy and its elements were. We have to rely on qualitative and casual evidence.

"Leakage ratios" for infrastructure programs

From the theoretical point we would expect fiscal policy and specifically fiscal expenditures to be most effective. Raising government expenditure in a recession is, according to conventional wisdom, assumed to be translated one to one into economic demand in the first period and then boosted by a "multiplier". Since stimulus programs were enacted in parallel in most countries in late 2008 or early 2009 import leakages should have been rather small. Since interest rates were slashed towards zero, this source of leakage could also be of little. On the contrary it is standard wisdom that tax reductions are subject to the uncertainty about the savings ratio. Since a certain part of income is saved, only part of the tax reduction is transferred into demand in the first period (and the savings rate tends to be rather large in a deep recession). Therefore, in standard models the impact (multiplier) of tax cuts is smaller than that of expenditure (see *OECD*, 2009, *IMF*, 2009). This conventional wisdom may have been wrong in this crisis due to the speed of the downturn and the need to react quickly. Casual evidence shows that it was very difficult to raise expenditure fast. In February 2010 the US government reported that out of 750 billion $ stimulus planned in early 2009 only about 272 billion $ had been enacted (including tax cuts). This is about one third of the total program. Even for the end of the Fiscal Year 2010, only 60% of the spending contained in the stimulus package will have occurred[3]. This concurs with experience in other countries. One full year after their implementation about one half of funds intended for Austrian stimulus packages have not yet been spent. More specifically out of the money intended to be spent in 2009 a large share could not be spent due to administrative problems up to the end of the year.[4]

A study for Austria investigates the planned stimulus programs and their effective implementation. While it is very difficult to compare various measures (tax cuts, credit, premium etc.) the result is clear-cut. At the end of 2009 66.7% of the planned tax cuts were set into force, while only 45.2% of the expenditures were spent (*Angelo – Feigl*, 2009). This would give a Leakage Rate of 54.8% for expenditures.

This makes the case for inserting a policy implementation or "Leakage Ratio" (LR) into economic models, which decreases or delays the demand effect of government expenditure planned in parallel to the "savings rate" (SR) which is modeled for tax cuts. From 100 € of planned government expenditure, a specific ratio will not be spent in the first period

[3] Joint Research Committee of the US Senate, February 2nd, 2010, Sam Brownback and Wiener Zeitung, 18.2.2010.

[4] Further research should be done to get broader evidence (which is currently more anecdotal than empirical).

and another ratio may never be spent, at least not before the economy recovers. This could change the balance in the expected growth effect of the two instruments. In current models multipliers for expenditure are, in the tradition of the Haavelmo theorem[5], always larger than that of tax cuts. If the "Leakage Ratio" (casual evidence indicates that the LR may be 30% to 40%) is higher than the Savings Rate out of tax cuts, the balance could shift[6].

Table 4: Estimate for Leakage Rate in Austria's stimulus programs

	Intended volume	Effective volume	Effective volume/ intended volume	Leakage Rate
	Mio. €		In %	
Tax cuts	3,200	2,135	66.7	33.3
Expenditures	1,146	518	45.2	54.8
All measures	4,346	2,653	61.0	39.0

Note: excl. "Konjunkturpaket 1", average of two estimates for "Konjunkturpaket 2".
Source: *Angelo - Feigl* (2009).

Incentive programs with caps and time slots

The measures which worked best with regard to their speed and their level of implementation were those which provided incentives to do something which already stood on the agenda of consumers or firms, and where this incentive was limited to a specific time frame and/or a pre-determined maximum amount of government subsidy. The best known example for this type of incentive are the "cash for clunkers programs", which subsidized the purchase of a new car (with little or no ecological restriction). These subsidies, if limited, were quickly exhausted, and car dealers even added a specific discount or prolonged the programs after the government subsidy had ended. A similar success had been private home renovation programs with an energy saving component (thermal renovation) e.g. in Austria. Thermal

[5] It claims that the multiplier of a fully tax-financed public expenditure is one.

[6] The literature uses for delays in the effect of government programs often the terms recognition lags, implementation lags and impact lags. The first refers to the time period, policy needs to recognize the necessity of action: this lag was rather short this time due to the speed of the downturn. The implementation lag refers to the period between the recognition and the time the legislative process takes time, the third refers to the time between decisions and effect on spending and jobs (intended outcome). If we speak of a leakage ratio, we refer to a mixture of the second and the third: government has decided to spend, authorizes some agency to do so and maybe even transfer the money or the provision to borrow with state guarantee, but the money is not yet spent, since additional planning, permissions, tenders are necessary. US Budget Office (February 2009) report, cited in the statement of Sam Brownback, assess that for large projects like highways "the initial rate of spending can be significantly lower than 25 percent". Furthermore some projects might turn out as not feasible, or they would have been done without stimulus programs (which tried to accelerate them, which then proved impossible). Maybe the term "leakage ratio" can summarize these effects better than implementation rate.

renovation of office buildings and schools proved more difficult to implement since administrative consent needed more time or schools declined to pay slightly higher rents for the period immediately after thermal renovation (even if in the long run "original rents" plus energy costs would have declined substantially and the investments were heavily subsidized).

A tentative lesson from this is that larger, bulky programs are more difficult to implement. Smaller projects, with an effective incentive, may be better from the perspective of their ability to quickly boost demand.

Table 5: Structure of packages

	Infrastructure		Science, R&D and innovation		Education		Green Technology	
	% of GDP	% of SP	% of GDP	% of SP	% of GDP	% of SP	% of GDP	% of SP
Austria	0.97	80.0	0.04	3.0	0.05	4.0	0.16	13.0
Germany	0.50	35.7	0.10	7.1	0.60	42.9	0.20	14.3
France	0.24	85.7	0.00	0.0	0.04	14.3	0.00	0.0
Finland	0.48	90.6	0.01	1.9	0.02	3.8	0.02	3.8
Sweden	0.27	42.5	0.29	45.6	0.02	2.5	0.06	9.4
Portugal	0.03	4.1	0.13	17.8	0.41	56.2	0.16	21.9
Poland	0.07	84.7	0.01	15.3	n.a.		0.00	2.4
Norway	0.16	66.7	0.01	4.2	0.01	4.2	0.06	25.0
Europe	0.27	41.0	0.09	14.0	0.22	33.6	0.07	11.4
Europe (incl. Norway)	0.25	42.9	0.08	13.5	0.18	31.3	0.07	12.3
USA	0.70	38.9	0.11	6.1	0.58	32.2	0.41	22.8

Source: tip, Mit Zukunftsinvestitionen aus der Krise? July 2009.

Tangible vs. intangible programs

An open question is whether intangible investment programs would not be better than programs for physical infrastructure. Overviews on stimulus programs (*Saha – Weizäcker*, 2009; *Breuss – Kaniovski - Schratzenstaller, 2009, Tip, 2009,*) show that most government programs were for traditional infrastructure expenditures. Very few programs increased spending for education, R&D and green issues[7]. Spending on education or research is traditionally not a constituent part of stabilization programs since its effect on potential output is correctly thought to occur only in the long run. What is important in a recession is, however, the demand effect of expenditure. And the multipliers of expenditure on education are probably higher than that of infrastructure projects (due to the smaller import component) and the employment effect even more so (intangible investments are less intensive in physical capital). An objection against this type of expenditure as anti-cyclical device is that it may not be as easy to reduce it after the crisis. Secondly the additional employees generated by such programs are very differently qualified from those losing their jobs in the crisis. If education expenditure in stimulus programs concentrates on re-qualification both objections against the focus on intangibles should lose importance. Summarizing, we believe that the

[7] Exceptions are Sweden which focused on R&D, Portugal focused on education and Norway on green technology, see Table 4.

long-term "supply side effect" on growth and employment of intangible investment is larger than that of physical infrastructure. The short run "demand side effect" of expenditures in research, education and other intangibles is larger too and finally the leakage rate for intangibles may also be smaller.

5. Making an economy more resilient

Combating a crisis after it occurred is usually more difficult and more expensive than preventing a crisis. But crises will always occur and it looks even as if market economies have become more susceptible to external shocks under globalization.

Aiginger (2009B) presents five methods (or policy areas) which increase the resilience of an economy, namely (i) upgrading industrial structures, (ii) increasing economic growth, (iii) placing more emphasis on longer-term goals by firms, analysts and economic policy, (iv) avoiding factors which actually cause economic crises and (v) shaping of institutions and incentive schemes which serve to stabilise the economy.

- Making economic structures more resilient could mean upgrading industrial structures by switching from resource intensive sectors to human capital and knowledge intensive sectors. It also means moving partly from manufacturing to services, more specifically towards knowledge-intensive services. The following factors also make an economy more resilient: shifting production from homogenous products to more differentiated products, increasing regional diversification of exports; building a buffer stock; and avoiding single sourcing and dependence on one big firm.
- Increasing economic growth decreases the probability of absolute declines and high unemployment. Within this strategy investment into education, innovation and requalification are important, as is a growth oriented structure of public expenditure and an employment friendly tax structure. Projects with dual purposes (environment, health) will help because demand is less cyclical for such expenditure.
- More emphasis should be attached to (i) long-run performance measures instead of quarterly profits, (ii) business start ups, and (iii) anti-cyclical wage policy (hopefully internationally coordinated). Targeting long-term processes, social inclusion and sustainability is important and a specific feature of the European Socioeconomic Model.
- Avoiding a crisis by smart regulation (not by a larger share of government in GDP), limiting the pro-cyclicality of research expenditure, and the pro-cyclical impact of finance by anti-cyclical reserve obligations should also be on the agenda. Reducing speculation with financial instruments by means of a financial transaction tax is as important as lower leverage ratios and a more stable shareholder structure.
- Stabilizing institutions involves a fiscal policy which provides budget surpluses in good times, and projects which are ready for construction and can be quickly started in a crisis. Innovative solutions to limit unemployment and to increase voluntary restrictions of work time (and increasing qualification) in recessions will help, as well as experience

ratings in the unemployment and health contributions of firms (those with better records pay less). A more equal distribution of incomes and wealth and a higher rate of consumption relative to GDP limit cyclical fluctuations ex ante and is smoothes consumption if a crisis occurs.

Table 6: Strategy elements to increase resilience: feasibility and side effects

	Controlable by Economic policy	Growth effect	Cost effect	National possible/ only international
Policy Area 1: More Resilient Economic Structures				
Strategy 1: Upgrading the industrial structure	difficult	positive	-	national
Strategy 2: Regional Diversification of Exports	somewhat	rather positive	-	national
Strategy 3: Build in Buffer and avoid Lock – In	partly (stocks)	negative	increasing	rather international
Strategy 4: Strengthening Automatic Stabilizers	yes	rather negative	-	national
Policy Area 2: Increasing Economic Growth				
Strategy 5: Investing into the Future	yes	positive	short-term increasing/ long-term decreasing	national
Strategy 6: Directing the Public Sector towards Growth	yes	positive	short-term increasing	national
Strategy 7: Projects with a dual purpose, high employment and growth effects	yes	yes	short-term increasing	national
Policy Area 3: Emphasising on Longer Term Goals				
Strategy 8: Measure performance over the long term	partly	rather positive (?)	increasing?	international
Strategy 9: Start ups	somewhat	positive	increasing	national
Strategy 10: Anti Cyclical Wage Policy	partly	?	private increasing	rather international
Strategy 11: Thinking more long term (European Model)	marginal	rather positive (?)	rather increasing	international
Policy Area 4: Avoiding a Crisis				
Strategy 12: Smart regulation	yes	positive	-	international
Strategy 13: Work against the pro cyclical nature of R&D expenditure	yes	positive	public increasing	national
Strategy 14: More critical evaluation of mergers and company size	yes	?	short-term increasing	international
Strategy 15: Tax financial transactions, evaluate financial innovations, reduce speculation	yes	rather positive (?)	slightly increasing	only international
Strategy 16: Deleveraging and a more stable shareholder structure	marginal	rather positive (?)	increasing	rather international
Strategy 17: More regionalization	somewhat	negative	increasing	national (limited)
Policy Area 5: Crisis Stabilizing Institutions				
Strategy 18: Budget surplus before a crisis	yes	short term/ long term	?	national
Strategy 19: Construction ready projects	yes	yes	positive	national
Strategy 20: Supporting firms with a viable business model only	somewhat	yes	slightly increasing	national
Strategy 21: Innovative solutions to limit unemployment	rather yes	yes	positive	national
Strategy 22: Experience Rating	yes	-	decreasing	national
Strategy 23: Broader company goals, trust and for distribution	difficult	positive?	short-term increasing/ long-term neutral	also national

The 23 strategies presented in table 6 could be the contents for an enlarged agenda of business cycle policy, combining demand management with structural policy. To be honest, not all strategies are achievable without potential negative side-effects and costs. Specifically, not all strategies to foster economic resilience are achievable without negative direct effects on growth[8]. Some strategies need similar policies to be pursued in parallel in other countries/regions and at an international level. Table 6 further demonstrates the feasibility of economic policy to influence a strategy, the side effects of the strategies on growth and competitiveness and their ability to be implemented on a national level. No strategy which leads to less openness and protectionism should be followed, since protectionism costs growth and jobs. The negative effects for the dynamic of the economy of some of the strategies need to be compensated by integrating special growth strategies into the overall strategy. In this way higher growth and employment could ideally be combined with greater stability.

6. Triumph and caveats for a Keynesian Economist without a hidden agenda

Policy was applied and worked

The core recommendation of Keynesian policy in a cyclical trough is to substitute decreasing private demand by increasing public demand (anti-cyclical policy recommendation). Economic policy in the Recent Crisis followed that recommendation and it worked. A complementary monetary policy is necessary for fiscal policy to be effective and this also happened. We also have to be especially grateful that most non-Keynesian economists did not dare to present their credo for policy abstinence openly (or at least were ignored by policy makers). This crisis was a test and so far a triumph for Keynesians. We rose to the challenges and succeeded: the cumulative downward spiral of lower export, decreasing investment, lower consumption ended after 1½ years and world economy is expected to grow between 3% and 4% in 2010.

The logical counter recommendation for "better times" would be to make budget surpluses. In the long run namely for the full cycle, budgets should be balanced according to the Keynesian anti-cyclical policy recommendation. It is possible that a policy minded economist might add the caveat, that the government should try to be on the safe side and should aim for a small surplus, since you never know how long a cycle will last, and a policy to increase expenditure is always more popular than the contrary. Furthermore, most governments use tricks (even if they are not Hellenics or advised by Goldman Sachs) and do not fully declare all liabilities in the official budget – especially the implicit burdens of pension obligations and the provisions for an ageing population. Sweden and Finland have been taking both these

[8] Indirect positive growth effects may come from the reduction of uncertainty which increases consumption and investment out of given incomes and profits.

issues into account and have aimed for a surplus over the full business cycle since the nineties.

The other side of the coin

This means that once the crisis is over the budget deficit has to be reduced. If this does not happen automatically, as a result of burgeoning tax revenues (at existing rates) in the recovery , government expenditure must be cut or tax rates must be increased. If neither is done government debt rises and the next downturn starts with higher level of debt. If tax rates are increased the next cycle starts with a higher share of taxes to GDP.[9] A Keynesian policy of this kind leads to a gradual increase in taxes to GDP. Again this is not the core of Keynesian anti-cyclical policy but either a policy agenda of its own or a result of a permissive economic policy.

The reality

The political reality is asymmetric behaviour: governments are quick to increase deficits and reluctant to build surpluses. In the current crisis very few countries started with a surplus (Sweden, Finland) and many more started with a rather deep deficit (US, United Kingdom, Italy). In most countries government debt in relation to GDP is on rise; in the EU-15 debt to GDP was 35% in 1970 and 82% in 2010 (see Table 7). The share of public expenditures on GDP rose from 42% to 51% (with some interim decline in the "neoliberal" nineties); debt to GDP was 18% in 1970 and is 74% in 2010. [10] In Austria debt relative to GDP increases with a speed of ten percentage points per decade.

Table 7: Government expenditures and debt relative to GDP in the EU 15

	Expenditures/GDP	Debt/GDP
1970	41.8	34.9
1980	46.7	39.5
1990	48.5	61.6
2000	45.0	63.1
2010	51.1	81.8

Source: Eurostat (AMECO).

Why is it so difficult to follow the "Keynesian recommendation" of anti-cyclical policy, but balanced budgets over a full cycle? Firstly, there is always a certain degree of uncertainty

[9] These statements hold specifically for slow growing economies. For high growth economies small non-increasing deficits are compatible with a certain ratio of debt to GDP.

[10] For the seventies unweighted average over 14 countries.

about the strength and speed of the recovery, and unemployment lags behind in any recovery. With unemployment high on their agenda politicians will always, justifiably to an extent, hesitate to end deficit spending early enough. This is at least a short-run justification. Secondly, economic models used for short-term forecasts and for fiscal projections usually emphasize the demand side effects of policies, not the long-run supply side effects. If you calculate the effects of a reduction of government debt in a model dominated by the demand side you will inevitable get lower growth and higher unemployment if you reduce government expenditures. The long-term positive effects via expectations or displacement effects (non Keynesian effects or Ricardian equivalence effect) are usually not elaborated in models used to forecast the short term or even medium term growth.

When budget deficits are reduced insufficiently or too late, debt/GDP ratios increase. In medium and high income countries with already substantial tax rates empirical analysis show that higher debt and higher tax rates have a negative effect on growth and employment[11].

Modeling the short run and the long run

Most models used for short and medium-term forecasts are dominated by an implicit Haavelmo effect, implying that balanced but higher revenues and receipts generate a positive contribution to GDP and that expenditure multipliers are larger than tax multipliers. This would recommend for the "exit strategy" to increase revenues since the multiplier of revenues is smaller. However, empirical studies on successful vs. unsuccessful budget consolidation across countries show, with surprising clarity, (see *Gruber – Pitlik*, 2010) that consolidation periods in which mainly expenditure was cut (e.g. Sweden and Finland in the nineties) were much more successful in terms of sustainability of consolidation as well in terms of growth prospects than consolidation in which taxes were increased (Italy). This result surprises researchers using standard short run Keynesian models. The result comes from the fact that multipliers can be instable namely larger in recession and smaller in good time. It may even happen that the sign of a specific variable changes during the consolidation period e.g. consumers increase spending if they know that public deficits are being reduced using a viable, fair, consistent program to reduce future government debt.

Basic Keynesian recommendations versus a hidden agenda in the exit phase

My first conclusion is that Mainstream Keynesians which are interested in the ability of economic policy to stabilize private demand over a cycle must strongly and honestly recommend the consolidation of budgets after the crisis. Significant surpluses in periods of

[11] This is the overall result (first level effect) of literature investigating the impact of government share or tax/GDP ratios on economic growth. There are qualifications (second level effects): the overall first level effect can be overruled by an excellent tax structure (low taxes on labor) or an excellent structure of government expenditure. And results do not hold for countries with low income and poor infrastructure. But economic arguments should not rely on exceptions, neither should recommendations for industrialized countries be based on evidence for low income countries. For overviews on the literature see *Handler – Schratzenstaller* (2006) and *Schratzenstaller* (2006).

strong economic growth are necessary – otherwise debt ratios will increase and limit the ability to combat the next crisis. The second conclusion is that if taxes do not recover automatically after the crisis government expenditure has to be cut. Otherwise tax ratios will increase from one cycle to the next (this happened up to the nineties with government share reaching between 40% and 50% of GDP at the start of the current crisis).

An agenda to increase the tax burden and to increase the debt/GDP ratio on purpose can be defended if: (i) public expenditure is much more efficient than private expenditure, (ii) an economy starts from an inferior infrastructure level and (iii) changing from a free market economy ("neoliberal model", Anglo Saxon Model) to a mixed or government dominated economy is the ultimate policy goal. However, if increasing the tax burden or changes the mix between private sector and public sector is the aim it should be stated explicitly and not inferred from a hidden agenda. If there is no such agenda, and a government debt ratio of 60% and a tax ratio of 40% to 45% (as it is pre-crisis level) is seen as rather high the Keynesian recommendation is straight forward: reduce deficits after the crisis and to do so mainly by cutting expenditure.

This core recommendation does not, and in my personal view should not, preclude that (i) taxes should be redistributive and reduce the income spread, (ii) expenditure should be used to make the economy more environmental minded and (iii) expenditure should be used to make the economy more socially inclusive. But if pre crisis tax rates are already high, the total tax revenues should not be further increased, but tax structure should be changed.

Under-consumption and secondary distribution (of net wages)

Having said that the core of Keynesian recommendations for fiscal policy is to react anti-cyclically in the trough and boom, but symmetric over the full cycle, we want to mention another part of the analysis in the General Theory which might give support the case to change tax structure more than tax rate. Keynes ponders whether the consequence of the law of the declining rate of consumption (with rising income) would not lead to an under-consumption tendency over time. This translation of a cross section argument into a tendency prevailing over time (if everybody becomes richer) is usually negated, since the cross section consumption curve is believed to be shifted over time by new goods and product innovation. Furthermore, in many rich countries no tendency has been seen for the consumption rate to decline (see the very low savings rate in the US). However, if such an under-consumption tendency existed over time, investment will not always be able to fill the gap and growth will decrease or level off. In this case one remedy would be to increase the share of government expenditure to fill the gap. If this is done in one or a few countries only (those in which under-consumption is a real trend) this country could lose competitiveness and growth[12].

[12] This holds ceteris paribus as the literature shows; of course there are exceptions where high government expenditures in rich countries are compatible with growth and employment, like Finland and Sweden.

One alternative way[13] to combat under-consumption is to raise wages, specifically lower wages. It is an important implication of the Keynesian consumption function that a more equal income distribution leads to higher consumption. However, this strategy is not easy to apply as far as primary (market) income is concerned, since the increasing wage differences seen within most industrialized countries are to a large extent due to either globalization or technology changes[14].

However, if the tax load is shifted from low incomes to higher incomes or property it is possible to raise net wages (including the possibility of in-work-benefits for the lowest tier). Since wage dispersion has increased within countries, lowering the spread of net income could be an important aim during a budget consolidation period with high unemployment. Combining a constant tax rate with a structural shift to financial assets, property or environmental taxes and a reduction of a tax burden for labor could be a good compliment to the reduction of the budget deficits, mainly by cutting expenditures. On the expenditure side it maybe advisable to eliminate inefficiencies, rather than cutting back on transfers which are important for the low income segment.

For example, a financial transaction tax or environmental tax, used to lower taxes on labor and specifically on lower paid labor, would be an interesting strategy following this side line of Keynesian thinking. It is still very different from increasing the overall tax rate and/or the debt/GDP Ratio after each crisis which would threaten the potential of anti-cyclical policy in the next crisis. For such a strategy see *Aiginger et al*. 2010 in their recommendations how to reduce public deficits in the exit phase.

7. Conclusion

The Current Crisis proved to be less dramatic and more specifically shorter than the Great Depression, if it leveled off in late 2009 and no second large dip will follow. Currently (April 2010) the world economy is predicted to grow between 3% and 4%, which cannot be compared to any of the weak increases of output in the thirties. Comparing the two crises the speed of the downturn during the first three or four quarters was rather similar – at least for exports and manufacturing. This time however economic policy reacted quickly and decisively and this was probably the main reason (together with the higher share of China in world output, and the higher share of services and the public sector in industrialized countries) why the crisis did not develop into a long and protracted downturn. This is a triumph for anti-cyclical policy as heralded by traditional "Keynesianism" and a triumph for economists in general which were able to learn from wrong policies during the Great Depression. We do however also have to be grateful to politicians who, in principle, accepted the recommendations.

[13] A second alternative is to increase product innovations or to restrict barriers for service industries with higher income elasticity (I am grateful to *Karl Pichelmann* for this remark).

[14] This means increasing differences in productivity between qualified and less qualified people.

Nevertheless, there are lessons to be learned from the policy implementation this time round which are important for future crises. The first lesson is that the naïve assumption of economic models that government expenditure will increase demand immediately and without leakages proved wrong. We learned specifically that large physical infrastructure projects needed a long time to be implemented and maybe never will be fully implemented due to administrative restrictions. This has already been acknowledged in literature but is often ignored in the economic models. Casual evidence shows that one year after the decisions to boost expenditure with an infrastructure program, at best one third or one half of this expenditure has actually been converted into effective demand. If models use planned budget figures provided by government it might be advisable to incorporate a Leakage Rate (LR) which lowers the "effective" spending in the first period relative to the planned one. Up to now most models applied (specifically those used for short-term forecasting) yield larger multipliers for government expenditure and lower ones for tax cuts, since the former starts with the full demand effect, the later after deducting the Savings Rate (SR). Tax cuts are easier to enact, but their impact is known to be delayed since it takes time for consumption to increase. What is less known and not modeled is, that once a particular course of expenditure is decided upon by government it takes time before the money reaches the ultimate investor (a state agency, a private firm, a community), and more time until all the permits and appropriations are completed, and all tenders are published, opened and decided. This inherent delay may shift the balance towards tax cuts (or smaller projects). Very casual experience for the working of stimulus programs in Austria indicates that the Leakage Rate for government expenditures might be higher than 50%.

The second lesson regards the structural effects of government spending. Analyzing stimulus programs has shown that most programs were rather conservative, spending more of the same. Green projects are rather rare, as is investment into education and research. Perhaps economic policy should consider shifting expenditure during anti-cyclical policy from physical to intangible investments. Usually the latter ones are not on the political agenda, since education and research only offer long-run yields. However, during the crisis the demand effect is decisive. And the demand effect of intangible investment may be larger – and the employment effect is definitely larger. Large infrastructure projects are capital intensive and often use imported machines. One problem, however, could be that expenditure on research and education needs to be continuous and not subject of stop and go policies. However, there are always things which could be done (requalification etc.) more intensively. Increasing public research money during crisis or period in which private firms tend to cut their research budgets may also be a good choice (private sponsoring run dry in recessions).

Thirdly, we reiterate that the core of anti-cyclical Keynesian recommendations is to increase government expenditure (including discretionary expenditures) in an economic trough and to cut them in an economic boom, so that budgets are balanced over the cycle. Some Keynesian economists are now reluctant to recommend expenditure cuts as the main way to reduce deficits. This asymmetry, boosting expenditure in the crisis and opposing expenditure

cuts after the crisis, leads either to a further increased debt/GDP ratio (if budgets are not balanced at all) or to a higher tax/GDP ratio (if budgets are balanced via increases in tax rates after the crisis). This is not the Keynesian approach of stabilizing demand if private demand is low. It may follow from political preferences, but this should honestly be argued separately. It is worth noting that the overwhelming empirical evidence shows that consolidations based on tax increases are not sustainable (deficits recur). Successful sustainable consolidations occur, where mainly expenditure is cut (maybe with an interim support of a higher tax rate which is later reduced). Traditional short-run models can give misleading advice in this situation: they emphasize the demand side and often fail to reflect the impact of expectations or other non-Keynesian effects. In traditional Keynesian models the cut in expenditure always reduces demand more than tax hikes. If we follow this advice of short run Keynesian models tax rates have to rise after each crisis. Policies following this line will undermine the standard Keynesian policy in the next crisis.

The fourth lesson is that it might be advisable to change the tax structure within a given share of taxes to GDP (i.e. changing tax structure not the overall showed tax) specifically in the exit phase of the current crisis; taxes on emissions, financial transactions (and property) could be increased, taxes on wages, specifically on low wages could be reduced. This would stabilize the financial sector, combat climate change, limit wage disparities, under consumption and unemployment. A discussion of "under-consumption" has some roots in the General Theory and there are some signs that this is a relevant topic today in Germany in specific. But this is a very different agenda from that of raising tax rates and/or increasing government debt. Investment incentives, fostering new products, boosting services with high income elasticity might be better alternatives.

Best of all would of course be to prevent future crises either through better regulation or through policies increasing the resilience of economies. Since it is not likely that crises and specifically financial crises can totally be prevented, we propose five types of policy measures which may limit the probability and scope of the next crises.

References

Aiginger, K., The Great Recession versus the Great Depression: Stylized Facts on Siblings That Were Given Different Foster Parents, Economics Discussion Papers, No 2010-9, http://www.economics-ejournal.org/economics/discussionpapers/2010-9

Aiginger, K. (2009A), The Current Economic Crisis: Causes, Cures and Consequences, WIFO Working Paper No 341/2009, http://www.wifo.ac.at/aiginger/crisis/

Aiginger, K. (2009B), "Strengthening the resilience of an economy, enlarging the menu of stabilization policy as to prevent another crisis", Intereconomics, October 2009, pp. 309–316. (http://www.intereconomics.eu/archiv/index.php?mode=jahr&jahr=2009&heftnummer=5)

Aiginger, K., "Jenseits von Keynesianismus und Neoliberalismus", WU-Antrittsvorlesung, 2006.

Aiginger, K., Perspektiven der Konjunkturforschung, ETH Zürich, Sonderbericht 175, März 1988.

Aiginger, K., Tichy, G., Walterskirchen, E. (Projektleitung und Koordination) (2006), WIFO-Weißbuch: Mehr Beschäftigung durch Wachstum auf Basis von Innovation und Qualifikation, WIFO-Monographie , Oktober 2006.

Aiginger, K., Sieber, S., Industriepolitik in Österreich: von selektiver Intervention zu einem systemischen Ansatz? WIFO Working Papers, Heft 337/2009.

Aiginger, K., Böheim, M., Budimir, K., Gruber, N., Pitlik, H., Schratzenstaller, M., Walterskirchen, E., Optionen zur Konsolidierung der öffentlichen Haushalte in Österreich, WIFO Monographien 2/2010, http://www.wifo.ac.at/wwa/servlet/wwa.upload.DownloadServlet/bdoc/S_2010_KONSOLIDIERUNG_OPTIONEN_38441$.PDF

Angelo, S., Feigl, G., "Umsetzung und Wirkung der konjunkturpolitischen Maßnahmen in Österreich", in Wirtschaft und Gesellschaft, Vol. 35, No. 4, 2009, pp. 527-549.

Breuss, F., Kaniovski, S., Schratzenstaller, M., "Macro-economic Effects of the Fiscal Stimulus Measures in Austria", Austrian Economic Quarterly, Volume 14, No. 4, 2009, pp. 205-216.

Buiter, W.H., Lessons from the global credit crisis for social democrats, background paper for the Dr. J.M. Den Uyzelling 2008, given on December 15, 2008, in the Rode Hoed, Amsterdam.

Cooper, G., The Origin of Financial Crises, Harrian House, 2008.

Davis, E.P., Karim, D., "Could early warning systems have helped to predict the sub-prime crisis?", National Institute Economic Review, 206, October, 2008.

Eichengreen, B., O'Rourke, K., A Tale of Depressions, 2009, http://www.voxeu.org/index.php?q=node/3421

Greenspan A.: The fed didn´t cause the Housing Bubble, Greenspan associates, March 11, 2009.

Gruber, N., Pitlik, H., Empirische Studien zu Erfolgsfaktoren von Konsolidierungen, in Aiginger et al., Optionen zur Konsolidierung der öffentlichen Haushalte in Österreich, Februar 2010.

Gurria, A., The long term starts now, OECD Observer 270/271, 2009.

Hahn, F.R., Die neue Basler Eigenkapitalvereinbarung ("Basel II") aus makroökonomischer Sicht, WIFO-Monatsberichte, 2/2003.

Hahn, F.R., Internationale Bankenkrise und die Rolle von Finanzaufsicht und Finanzinnovationen, WIFO-Monatsberichte 8/2008.

Handler, H., Schratzenstaller, M., Substudy 7: The Role of the State, in: Aiginger, K., Tichy, G., Walterskirchen, E. (Project Management and Coordination), WIFO White Paper: Towards Higher Employment via Economic Growth Based on Innovation and Qualification, 2006.

Helbling, T., How Similar is the Current Crisis to the Great Depression? 2009, http://www.voxeu.org/index.php?q=node/3514

IMF, Financial Stability Report, Washington, April 2009.

IMF, World Economic Outlook, Crisis and Recovery, Washington, April 2009.

Larosière, Report, Causes & repair of the Financial Crisis, Brussels, 2009.

Leijonhufvud, A., Fixing the Crisis, The Role of Regulation and Monetory Policy, OeNB, 37th Economics Conference, Vienna, 2009.

Mooslechner, Peter: Finanzkrise, quo vadis?, Contures 4, 2008

OECD, OECD Economic Outlook, No. 86, Paris, 2009.

Reinhart, C.M., Rogoff, K.S., The Aftermath of Financial Crises, NBER Working Paper No. 14656, January 2009.

Romer, Ch. D., Lessons from the Great Depression for Economic Recovery in 2009, Council of Economic Advisers, to be presented at the Brookings Institution, Washington, D.C., March 9, 2009

Sachverständigenrat, Die Finanzkrise meistern – Wachstumskräfte stärken, Jahresgutachten 2008/09.

Saha D., Weizäcker J. Estimating the size of European stimulus packages for 2009: an update, Bruegel, 20.2.2009

Schratzenstaller, M., Substudy 12: Momentum for Growth from the Public Purse, in: Aiginger, K., Tichy, G., Walterskirchen, E. (Project Management and Coordination), WIFO White Paper: Towards Higher Employment via Economic Growth Based on Innovation and Qualification, 2006.

Schulmeister, St., Handelsdynamik und Preisschwankungen auf Finanzmärkten und das Stabilisierungspotential einer Finanztransaktionssteuer, WIFO-Monatsberichte, Heft 8/2008.

Schulmeister, St., Schratzenstaller, M., Picek, O., A General Financial Transaction Tax. Motives, Revenues, Feasibility and Effects, WIFO-Monographie, 3/2008.

Spilimbergo, A., Symansky, St., Blanchard, O., Cottarelli, C., Fiscal Policy for the Crisis, IMF Staff Position Note, December 29, 2008.

Summer, M., Die Finanzkrise 2007/08 aus der Perspektive der ökonomischen Forschung, Geldpolitik & Wirtschaft, Quartalsheft zur Geld- und Wirtschaftspolitik Q4/08, OeNB, 2008.

Taylor, J.B., The Financial Crisis and the Policy Responses: An empirical analysis of what went wrong, NBER Working Paper 14.631, 2009.

Tichy, G., Front Runner-Strategie: Definition und Umsetzung, Plattform Forschungs- und Technologieevaluierung, No. 34, 03/2010.

Tichy, G., Subprime crisis – Alleinschuld der Banken? mimeo, 2008.

Tip, Mit Zukunftsinvestitionen aus der Krise? Tip Policy Brief, Juli 2009.

US Budget Office, Joint Economic Committee, Senator Sam Brownback, Fiscal Policy Stimulus: Timely, Targeted, and Temporary? February 2009.

Wolfmayr, Y., The Impact of the Global Economic Crisis on the Austrian Exports, 2009.

World Economic Forum, The Future of the Global Financial System, A Near-Term Outlook and Long-Term Scenarios, A World Economic Forum Report, 2009.

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