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**Sebastian Dullien, Eckhard Hein, Achim Truger
and Till van Treeck (eds.)**

The World Economy in Crisis – The Return of Keynesianism?

Post crisis policy: Some reflections of a Keynesian economist

*Karl Aiginger**

1. Introduction

There are 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 inappropriate regulation of an overly 'innovative' financial sector. The focus of this chapter is to present stylised facts about the current crisis, the role of economic policy and what we could learn from the policies applied. We make the point that a future-oriented stabilisation 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 Recent Crisis¹ with the Great Depression, using seven indicators on economic activity. The evidence shows that the Recent Crisis (though it was the deepest since World War II and the first period in which world GDP declined in absolute terms) did not come close to reaching the dimensions of the Great Depression.

* The chapter is partly based on Aiginger (2009a, b and c) and Aiginger (2010). The author thanks Heinz Handler, Serguei Kaniovsky, Helmut Kramer, Karl Pichelmann, Gunther Tichy and Andreas Wörgötter for valuable comments and Dagmar Guttman and Karolina Trebicka for research assistance.

¹ We use the term 'Recent Crisis' and use capitalised letters following Aiginger (2010). Other authors call it 'Financial Crisis' or 'Great Recession'. The term 'Recent Crisis' seems preferable to the author because it allows the interpretation that the crisis is not over specifically as far as unemployment and public debt is concerned and the financial sector is not yet reformed.

We then describe the speed of decline and its length. 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 recapitalise banks.

Section 4 discusses experiences with policy measures, specifically (i) the implementation lags of infrastructure programs, and (ii) the striking success of incentive programs with caps and time slots. Furthermore, we discuss the structurally conservative approach (focussing on physical infrastructure) of policies implemented and whether a focus on intangible programs (like education and research) could be advisable. Section 5 presents a larger choice of measures that 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.

2. Comparing the Recent Crisis to the Great Depression

2.1 The overall result

There have been numerous and controversial assertions about the relative scope of the two crises, maybe championed by Romer (2009) who claimed that the Recent Crisis is dwarfed by the Great Depression and Eichengreen and O'Rourke (2009) who provided real time data (with monthly updates) indicating that the Recent Crisis had been or was as deep as the Great Depression. If the Recent Crisis is over – as currently indicated by the mainstream predictions, at least for GDP – the result is clear-cut: the Recent Crisis proved to be much smaller. Aiginger (2010) presents evidence as to the depth of each of the 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 a measure.

There are especially large differences between the two crises for GDP growth, employment and unemployment. Considerable differences for exports and the stock market indices (on a monthly or quarterly basis) can be shown. The smallest difference was for manufacturing output in real terms. There had been a severe deflation in the 1930s, while this time, there were only a few short episodes where the overall price level declined.

Table 1: Stylised facts: Activity indicators, unweighted average over ten industrialised countries

	Great Depression	Recent Crisis	
	1932/1929	2009/ peak 2007/2008	Trough 2009/ peak 2007/2008
	Annual data	Annual data	Quarterly data
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 industrialised countries: Austria, Germany, Belgium, Spain, France, Finland, Sweden, United Kingdom, USA, Japan

Source: Aiginger (2010), WIFO Long-term Database (using Maddison, IMF, Groningen, BEA, Dresdner Bank, Butschek)

2.2 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 globalisation, supports the view that this crisis had the potential to develop into a Great Depression. The speed of decline for employment and unemployment in this crisis was never as fast as in the Great Depression.

The share of the decline of GDP in the first year, relative to the overall decline for the prolonged crisis, was relatively small in the Great Depression. By contrast, most, if not all, of the decline in the Recent Crisis happened during 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 to or during World War II. The Recent Crisis lasted only 1½ years, again if you assume that there is no large second dip after the signs of recovery in late 2009 and early 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 markets are recurrently emerging or a sovereign debt crisis cannot be excluded.

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 two crises was economic policy. Economic policy, specifically monetary policy and fiscal policy, reacted 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. Policy makers tried to keep budgets balanced, and counteracted the automatic stabilisers by increasing tariffs and taxes and by reducing expenditure. In the Recent Crisis, automatic stabilisers 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, recapitalisation or nationalisation. Furthermore, all these measures were implemented expeditiously and sometimes with coordination at an international level. A similar difference could be observed for monetary policy. In 1929, interest rates were first increased, and then cautiously reduced. High rates of deflation turned the lower nominal interest rates into high real interest

Table 2: Speed of downturn in the first three quarters, in percentage change

	Great Depression			Recent Crisis	
	Overall drop 1929/1932	1929/1930	First three quarters	Overall drop 2009/2008	First three quarters
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 and O'Rourke (2009)

Source: Aiginger (2010), WIFO Long-term Database (using Maddison, IMF, Groningen, BEA, Dresdner Bank, Butschek)

rates. Money supply declined over several years in many countries (at least in nominal terms). This time, monetary policy slashed interest rates towards zero and engaged in traditional and innovative ways to increase the 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, the G20, the European Union, the IMF, and the World Bank.

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 definitive, 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.

4.1 '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 (reduction of the multiplier) could also be of little significance.

In contrast, according to standard wisdom, tax reductions do not work as well as they 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.

Table 3: Policy indicators

	Great Depression 1929/1932	Recent Crisis 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

Source: Aiginger (2010), WIFO Long-term Database (using Maddison, IMF, Groningen, BEA, Dresdner Bank, Butschek)

In February 2010, the U.S. 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.² Even for the end of the Fiscal Year 2010, only 60 per cent 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 of the Austrian stimulus packages, about one half of the funds have not yet been spent. More specifically, out of the money intended to be spent in

² Wiener Zeitung, February 18th 2010.

³ Joint Research Committee of the U.S. Senate, February 2nd, 2010, Sam Brownback.

2009, a large share could not be disbursed due to administrative problems. 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 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, always larger than those of tax cuts. If the 'Leakage Ratio' – casual evidence shows that the LR may be 30 per cent to 40 per cent – is higher than the 'Savings Rate' out of tax cuts, the balance could shift.⁴

4.2 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 predetermined maximum amount of government subsidy. The best known example for this type of incentive are the 'cash for clunkers programs',

⁴ For delays in the effect of government programs, literature often uses the terms 'recognition lags', 'implementation lags' and 'impact lags'. The first refers to the time period policy needs to recognise 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, authorises some agency to do so and maybe even transfers the money or the provision to borrow with state guarantee, but the money is not yet spent, since additional planning, permissions, tenders are necessary. A U.S. Budget Office (January 2008) report, cited in the statement of Sam Brownback (see footnote 2), states that for large projects like highways "the initial rate of spending can be significantly lower than 25 per cent". 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 summarise these effects better than the term implementation rate.

should lose importance. In any event the long-term effect on growth and employment of expenditure on education, research or intangible infrastructure is larger – in industrialised countries – than that of physical infrastructure.

5. Making an economy more resilient

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 means upgrading industrial structures by switching from resource-intensive sectors to high-tech 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 homogeneous products to more differentiated products, increasing regional diversification of exports; building a buffer stock; and avoiding single sourcing.
- Increasing economic growth decreases the probability of absolute declines and high unemployment. Within this strategy, investment in 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 for such goods and services is less cyclical.
- 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 are important and a specific feature of the European Socioeconomic Model.

Table 4: 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.	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 (2009)

- 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 all 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.
- Stabilising institutions involves a fiscal policy which provides budget surpluses in good times, and projects which are ready for implementation 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 firms' contributions to unemployment and health insurances – those with better records pay less. A more equal distribution of incomes and wealth, and a higher rate of consumption relative to GDP limits cyclical fluctuations *ex ante* and smoothes consumption if a crisis occurs.

The 23 strategies presented in Table 5 (p. 258) 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.⁶ Some strategies need similar policies to be pursued in parallel in other countries/regions and at an international level. Table 5 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 for by integrating special growth strategies into the overall strategy. In this way, higher growth and employment could ideally be combined with greater stability.

⁶ Indirect positive growth effects may come from the reduction of uncertainty, which increases consumption and investment out of given incomes and profits.

*6. Triumph and caveats for a Keynesian economist
without a hidden agenda*

6.1 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 triumph for Keynesians. We rose to the challenges and succeeded.

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. 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 issues into account and have aimed for a surplus over the full business cycle since the 1990s.

*Table 5: Strategy elements to increase resilience:
feasibility and side effects*

		Controllable by economic policy	Growth effect	Cost effect	National possible/ only inter- national
Policy Area 1: More resilient Economic structures					
Strategy 1	Upgrading the industrial structure	difficult	positive	-	national
Strategy 2	Regional diversifi- cation of exports	somewhat	rather positive	-	national
Strategy 3	Build in buffer and avoid lock – In	partly (stocks)	negative	increasing	rather inter- national
Strategy 4	Strengthening au- tomatic stabilizers	yes	rather negative	-	national
Policy Area 2: Increasing economic growth					
Strategy 5	Investing into the future	yes	positive	short-term increasing / long- term de- creasing	national
Strategy 6	Directing the public sector to- wards 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 perform- ance over the long term	partly	rather po- sitive (?)	increa- sing?	inter- national
Strategy 9	Start ups	somewhat	positive	increasing	national
Strategy 10	Anti Cyclical wage policy	partly	?	Private increasing	rather inter- national
Strategy 11	Thinking more long term (Euro- pean Model)	marginal	rather positive (?)	rather increasing	Inter- national
Policy Area 4: Avoiding a crisis					
Strategy 12	Smart regulation	yes	positive	-	Inter- national

		Controllable by economic policy	Growth effect	Cost effect	National possible/ only inter- national
Strategy 13	Work against the pro-cyclical nature of R&D expendi- ture	yes	positive	public increasing	national
Strategy 14	More critical evaluation of mergers and com- pany size	yes	?	short-term increasing	interna- tional
Strategy 15	Tax financial transactions, evaluate financial innovations, reduce speculation	yes	rather positive (?)	slightly increasing	only inter- national
Strategy 16	Deleveraging and a more stable share- holder structure	marginal	rather positive (?)	increasing	rather inter- national
Strategy 17	More regionalization	somewhat	negative	increasing	national (limited)
Policy Area 5: Crisis stabilizing institutions					
Strategy 18	Budget surplus be- fore a crisis	yes	short-term /long-term	?	national
Strategy 19	Construction ready projects	yes	yes	positive	national
Strategy 20	Supporting firms with a viable busi- ness 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

Source: Aiginger (2009b)

6.2 *The other side of the coin*

This means that once the crisis is over, budget deficits have 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. A Keynesian policy of this kind leads to a gradual increase in the ratio of taxes to GDP. Again, this is not the core of Keynesian policy but either a policy agenda of its own or a result of a permissive economic policy.

6.3 *The reality*

However, 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 (U.S., U.K., Italy). In most countries government debt in relation to GDP is on rise; in the EU-15 debt to GDP was 35 per cent in 1970 and 82 per cent in 2010 (see Table 6). The share of public expenditures on GDP rose from 42 per cent to 51 per cent (with some interim decline in the 'neo-liberal' 1990s).⁷

Table 6: Government expenditures and debt relative to GDP in the EU15

	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)

⁷ For the 1970s unweighted average over 14 countries.

Why is it so difficult to follow the ‘Keynesian recommendation’? Firstly, there is always a certain degree of uncertainty about the strength and speed of the recovery, and unemployment always lags behind 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 emphasise 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 inevitably get lower growth and higher unemployment. The long-term positive effects via expectations or displacement effects (non-Keynesian effects or Ricardian effects) are usually not elaborated in models used to forecast 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.⁸

6.4 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 expenditure multipliers are larger than tax multipliers. This would lead to the recommendation to run an ‘exit strategy’ from expansionary fiscal deficits by increasing revenues since the negative effect of tax increases is smaller than the negative effect of a corresponding cut in expenditure. However, empirical cross-country studies on successful vs. unsuccessful budget consolidation show, with surprising clarity, (see Gruber/Pitlik 2010) that consolidation periods in which mainly expenditure was cut – e.g. Sweden and Finland

⁸ 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 labour) 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 industrialised countries be based on evidence for low income countries.

in the 1990s – were much more successful (in terms of sustainability of consolidation as well in terms of growth prospects) than consolidation in which taxes were increased – e.g. Italy. This result surprises researchers using standard short-run Keynesian models. One of the reasons for this result comes from the fact that multipliers can be instable namely larger in recession (making additional government spending very efficient) and smaller in good time (lowering the reduction in total demand originating from cuts in public spending). It may even happen that the sign of a specific variable changes during the consolidation period, e.g. consumers increase spending (or decrease savings) if they know that public deficits are being reduced using a viable, fair, consistent programme to reduce future government debt.

6.5 Basic Keynesian recommendations versus a hidden agenda in the exit phase

My first conclusion is that true Keynesians must strongly and honestly recommend the consolidation of budgets after the crisis. Significant surpluses in periods of 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 per cent and 50 per cent 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' or Anglo-Saxon model) to a mixed or government-dominated economy is the ultimate policy goal. However, if increasing the tax burden or changes to 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 per cent is seen as rather high and there is a tax ratio of 40 per cent to 45 per cent (as it is pre-crisis level) the Keynesian recommendation is straightforward: reduce deficits after the crisis, and 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 environmentally-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.

6.6 Underconsumption and changing 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 support the case to change tax structures more than tax rates. 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 observed for the consumption rate to decline (see the very low savings rate in the U.S.). 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) these countries could lose competitiveness and growth.⁹

An alternative way 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

⁹ This holds *ceteris paribus* as the literature shows; of course there are exceptions where high government expenditure in rich countries is compatible with growth and employment, like Finland and Sweden.

primary (market) income is concerned, since the increasing wage differences seen within most industrialised countries are to a large extent due to either globalisation or technology changes.¹⁰

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 the tax burden for labour could be a good compliment to the reduction of budget deficits, mainly by cutting expenditures. On the expenditure side, it may be 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 labour and specifically on lower paid labour, would be an interesting strategy following this side-line of Keynesian thinking. In contrast to a strategy of increasing the overall tax rate and/or the debt/GDP ratio after each crisis, this approach would not threaten the potential of anti-cyclical policy in the next crisis. For more details on such a strategy, see Aiginger et al. (2010) and their recommendations on how to reduce public deficits in the exit phase.

7. Conclusion

The Recent Crisis proved to be less dramatic and, more specifically, shorter than the Great Depression – if it leveled off in late 2009 and no second dip follows. 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 industrialised countries) why the crisis did not develop into a long and protracted downturn. This is a triumph

¹⁰ This means increasing differences in productivity between qualified and less qualified people.

for anti-cyclical policy as heralded by traditional 'Keynesianism', and a triumph for economists in general. We do however have to be grateful to politicians who, in principle, reacted in the right way.

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 infra-structure 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 ones. Up to now, the Keynesian models applied 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 modelled is that once a particular course of expenditure is decided upon, it takes time before the money reaches the ultimate investor (a state agency, a private firm, a community), and 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).

The second lesson regards the structural effects of government spending. Analysing stimulus programs has shown that most programs were rather conservative, spending on more of the same. Green projects are rather rare, as is investment in 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 to stop-and-go policies. However, there are always things which could be done (requalification etc.) more intensively. Increasing public research money during crisis or periods in which private firms tend to cut their research budgets may also be tenable.

Thirdly, we reiterate that the core of Keynesian recommendations is to increase government expenditure 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 tax increases after the crisis). This is not the Keynesian approach. 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. Traditional short-run models can give misleading advice in this situation: they emphasise 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, while taxes on wages, specifically on low wages could be reduced. This would stabilise the financial sector, combat climate change, and limit wage disparities, under-consumption and unemployment. But this is a very different agenda from that of raising tax rates and/or increasing government debt.

The overall preferable solution of course would 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. (2010): The Great Recession versus the Great Depression: Stylized facts on siblings that were given different foster parents, Economics Discussion Papers, No. 2010-9, URL: <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, URL: <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, in: *Intereconomics*, 44, 309 – 316.
- Aiginger, K., Böheim, M., Budimir, K., Gruber, N., Pitlik, H., Schratzenstaller, M., Walterskirchen, E. (2010): Optionen zur Konsolidierung der öffentlichen Haushalte in Österreich, WIFO Monographien, No. 2/2010
- Eichengreen, B., O'Rourke, K. (2009): A tale of two depressions, VOX Column, URL: <http://www.voxeu.org/index.php?q=node/3421>.
- Gruber, N., Pitlik, H. (2010): Empirische Studien zu Erfolgsfaktoren von Konsolidierungen, in: Aiginger et al. (2010), Optionen zur Konsolidierung der öffentlichen Haushalte in Österreich, WIFO, February.
- International Monetary Fund [IMF] (2009): World Economic Outlook, Crisis and Recovery, Washington D.C., April.
- Organisation for Economic Co-operation and Development [OECD]: OECD Economic Outlook, No. 86, Paris.
- Romer, C.D. (2009): 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 9th.
- Saha, D., Weizsäcker, J. (2009): Estimating the size of European stimulus packages for 2009: An update, Bruegel, February 20th.
- Tip (2009): Mit Zukunftsinvestitionen aus der Krise? Tip Policy Brief.