



Munich Personal RePEc Archive

## **Economic policy and the financial and economic crisis**

Kowalski, Tadeusz

Poznan University of Economics

15 August 2011

Online at <https://mpra.ub.uni-muenchen.de/33994/>  
MPRA Paper No. 33994, posted 09 Oct 2011 22:53 UTC

**Working Papers**  
**Faculty of International Business and Economics**  
**Poznan University of Economics**

WP/2011/01

Tadeusz Kowalski

**Economic Policy and the Financial and Economic Crisis**

Poznań, August 15, 2011

# Economic Policy and the Financial and Economic Crisis

*Tadeusz Kowalski\**

**Keywords:** quantitative policy, qualitative policy, monetary policy, exchange-rate policy, financial and economic crisis, globalization

**JEL:** E02, E12, E13, E30, E61

## **Abstract**

The aim of this paper is to present and evaluate the theory and principles of economic policy applied before the 2008-2009 crisis<sup>1</sup>. Against this backdrop we will attempt to describe the evolution of targets and tools of economic policy in view of the experiences of recent years and the conditions of the globalization in this time. The first Section contains an outline of the world economic situation after 1945. Section two includes presentation and evaluation of the evolution of economic policy theory which co-created the conditions for world economic growth and stabilization in recent decades. The third Section describes macroeconomic mechanisms and conditions of economic policy directly preceding the 2007-2011 situation, and provides an analysis of the 2008-2009 crisis implications for the theory and future practice of economic policy. The paper is summed up in a conclusion.

## **1. Economic Development After 1945**

1945-1971, in the history of both North American and European economies, was among the most prosperous of periods [Table 1]. It made history as the *Golden Age of Capitalism* [Marglin, Schor, 1990]. The world economy of that time was strongly influenced by American global leadership, politics and innovativeness. As a result of the then favorable

---

\* Paper accepted for publication by Marian Gorynia. All remaining errors are those of the author. The first version of the paper was presented at the Conference on Contemporary Global Economy; Micro and Macro Aspects, held at the Poznan University of Economics, Poznan, April 07, 2011. The author works at the Department of Strategy and Policy of International Competitiveness, Faculty of International Business and Economics, Poznan University of Economics. The author's e-mail address: [tadeusz.kowalski@ue.poznan.pl](mailto:tadeusz.kowalski@ue.poznan.pl)

objective conditions of supply and demand (post-war reconstruction, progress in organization and technology, high supply of qualified labor force, etc.), and the stability of the Bretton Woods system, the American and European economies were growing at a fast and relatively stable rate (Table 1). The period was furthermore characterized by relatively low inflation. Countries largely financed private investments and public sector borrowing requirements from domestic savings; there were relatively minor international capital flows<sup>2</sup>.

Table 1. Rate of growth and inflation in the USA and European Union countries  
in 1951-1970

	1951-1960	1961-1970	1971-1980	1981-1990
<b>USA</b>				
<b>Real GDP growth</b>				
average growth rate	3.4	4.2	3.3	3.2
standard deviation	2.9	2.0	2.5	2.2
<b>Inflation</b>				
average rate	2.1	2.8	7.9	2.6
standard deviation	2.3	1.7	3.1	0.5
<b>European Union countries (EU 15)</b>				
<b>Real GDP growth</b>				
average growth rate	4.8	4.8	3.0	2.4
standard deviation	1.4	0.9	1.7	1.2
<b>Inflation</b>				
average rate	3.6	3.9	10.8	6.7
standard deviation	3.0	0.8	2.8	2.9

Source: Eichengreen 2000, p. 30.

This era symbolically ended first with the temporary suspension of the dollar's peg to gold (August 1971) and then with the systemic departure of developed countries from the fixed exchange rate system (March 1973) [Eichengreen 2000, p. 30].

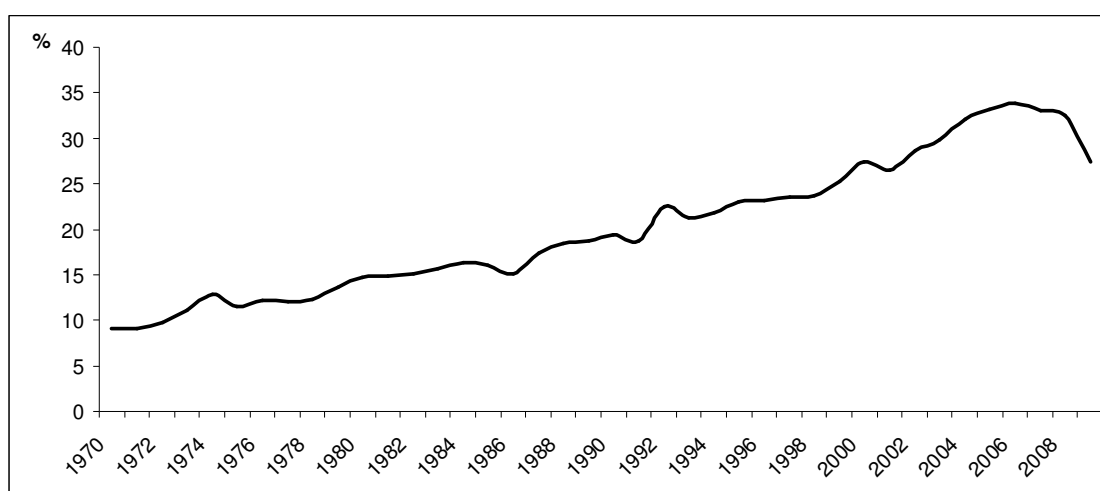
The seventies and early eighties of the twentieth century were characterized by supply shocks and demand disruptions which completely changed the macro- and microeconomic environment of designing and implementing economic policy. The growth rate significantly decreased and its volatility increased (Table 1). Also, the level and volatility of inflation rose

rapidly. High inflation was followed by growing unemployment. This situation gave rise to reevaluation in the theory of economic policy and changes in the area of systemic solutions including both *qualitative policy* and *quantitative policy*<sup>3</sup> (see Section 2).

The 1980s were characterized by diversified global economic conditions. In the case of the USA and Europe these included still low GDP growth rates but with a reduced inflation rate (Table 1). The situation was particularly difficult in Europe; the 1980s came to be referred to as the time of *eurosclerosis* [Olson 1996].

The 1970-1990s in the global economy was distinguished by the growing importance of trade exposure (Graph 1). After 1970 the share of exports of goods and services in the

Graph 1. Share of exports of goods and services in global GDP in 1970-2009\*



\* Note: “Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called factor services) and transfer payments”; WDI Data Base.

Source: World Development Indicators Data Base.

world Gross Domestic Product (GDP), with minor breaks, displayed an upward trend. This trend continued in 2000s (Graph 1). It was however, halted by the global recession; in 2006 the export exposure reached the highest point of 33,9% of the global GDP and then fell by 6,5 percentage points in 2009 – the highest drop in the post World War II era. The American economy was the fundamental source of global demand, but gradually the significance of other countries and regions increased, including the European Community, particularly Germany, and further afield Japan in Asia.

The 1990s and the early 2000s were characterized, especially in the USA, by a high and relatively stable growth rate<sup>4</sup>. The first decade of the 21<sup>st</sup> century featured the longest

economic growth phase in history, lasting 120 months (Table 2). Positive economic trends, especially in fighting inflation, occurred in Europe<sup>5</sup>.

Table 2. Business cycles and length of expansion and contraction phases (in months)  
in the USA after 1945

Business cycle turning points		Length (in months)	
Peak	Bottom	Contraction phase	Expansion phase
1945 (February)	1945 (October)	8	80
1948 (November)	1949 (October)	11	37
1953 (July)	1954 (May)	10	45
1957 (August)	1958 (April)	8	39
1960 (April)	1961 (February)	10	24
1969 (December)	1970 (November)	11	<b>106</b>
1973 (November)	1975 (March)	<b>16</b>	36
1980 (January)	1980 (July)	6	58
1981 (July)	1982 (November)	<b>16</b>	12
1990 (July)	1991 (March)	8	92
2001 (March)	2001 (November)	8	<b>120</b>
2007 (December)	2009 (June)	<b>18</b>	73

Source: Own compilation based on US business cycle expansions and contractions, NBER.

Since the mid-1980s, the processes of economic globalization and regionalization have picked up pace. Countries successively followed the liberal reforms introduced in the United Kingdom. An important role in promoting the liberal model of economic and systemic solutions was played by the International Monetary Fund (IMF) [Kowalik 2002, p. 276 et seq., Findlay & O'Rourke 2004, p. 496 et seq.]. These parallel trends led to the rise in the importance of trade (Graph 1) and capital flows, and in the regional dimension – deepening of European integration and implementation of the decision on building a single and uniform European market [Hitiris 2003, pp. 63-83; Pelkmans 2006, pp. 79-99]. The direction and pace of European integration inspired and influenced the processes of regionalization in other parts of the world [Frenkel 1998; Gilpin 2000, p. 193 et seq.; Geyer 2006].

Economic globalization accelerated even further after the end of the Cold War in 1989, taking over, with all economic, social and political implications, the countries of

Central and Eastern Europe. Literature on the subject refers to this period as the *Second Great Age of Capitalism* [see Gilpin 2000, p. 15]. The period before mid-2007 was extremely advantageous for the global economy. World GDP in fact grew faster than the world's population. One of the major structural features of the economy was the increase in capital flows and global trade, significantly higher than the output growth. The development of trade, both worldwide and within regional integration groupings<sup>6</sup>, allowed for a better allocation of resources and increase in production factors' productivity. The expansion of trade relations was possible due to consecutive rounds of trade liberalization within the General Agreement on Tariffs and Trade (GATT), then the foundation of the World Trade Organization (WTO) in 1995, and finally admission of the People's Republic of China to this organization in 2001. China's full-fledged entrance to the world trade has significantly modified ongoing macroeconomic processes<sup>7</sup>. This major structural shift was accompanied by the diminishing capacity of democratic national states to efficiently influence the direction and course of autonomous market adjustments. Permanent trade surplus and influx of direct foreign investments led to the accumulation of huge foreign reserves in China; the country became one of the main purchasers of American T-bills, T-bonds and other financial assets, thus largely contributing to the increase of overliquidity on the American financial markets<sup>8</sup>.

Among the most important macroeconomic factors co-creating these processes was the increase of overliquidity in the years directly preceding the recession, both in the USA and worldwide. As a result of an expansionary monetary policy in the first years of the 21<sup>st</sup> century, as well as the asymmetry of global supply and demand of savings, interest rates in the US financial market were falling from December 2000 to May 2004<sup>9</sup>. Since then, interest rates in the financial markets both in the USA and worldwide began to rise, climbing up to their highest level before the crisis (in the USA from January to May 2007), and in the global economy in March 2007 [Gorynia, Kowalski 2008, p. 221 et seq.]. Starting at these turning points, the market rates, under the influence of a mass intervention of central banks, began to drop again, reaching virtually a zero nominal level at the peak of the intervention.

Such evolution of money supply and interest rates was accompanied in 2002-2006 by a growing budget deficit in the USA and a structural current account deficit. In 2000-2008 the American current account deficit ranged from 3.9 to 6.0% of the US GDP.

Overliquidity in the financial sector, low real interest rates, and rapid development in financial securitization and innovation, significantly contributed to a systematic growth of demand for residential and nonresidential real estate, and consequently – to the increase their prices<sup>10</sup>. Since the beginning of 2003, the stock market also experienced an intensified influx

of capital. The stock market however, suddenly collapsed in the fall of 2007. Similar trends could be seen in the global commodity markets. The general index of commodity prices reached its peak in May-July 2008, more than doubling its 2005 level<sup>11</sup>. After the collapse of raw material prices in late 2008 and early 2009, the index started to rise again.

The years preceding the 2008-2009 recession, despite the presented symptoms of current and structural imbalances, especially in the USA, made economic history as the period of prosperity and stability. Economic literature refers to it as *the Great Moderation*<sup>12</sup>. This period significantly influenced the consumption and saving pattern of households and investment behavior of businesses in both the real and financial sectors. It also shaped the design and implementation of economic policy.

## **2. Theory and practice of economic policy**

The post-war reconstruction of European economies and the growth of the American economy until the early 1970s, (see Section 1), followed the then Keynesian consensus<sup>13</sup>. In the field of positive economics, it was a period of undisputed domination of the adaptive expectations hypothesis [Kowalski 1998], and the development of investment, consumption and economic growth theories.

The sphere of normative economics was also dominated by various streams of Keynesian economics, including welfare economics. They created foundations for recommendations regarding the standard economic stabilization policy. Theoretical foundations for *quantitative* and *qualitative* economic policy were developed by Jan Tinbergen [Tinbergen 1955, 1956]. His general systemic approach emphasizing the targets-instruments relations was subsequently extended both in terms of the econometric apparatus<sup>14</sup>, as well as the context of the open economy<sup>15</sup>.

Under the prevailing consensus of that time, economic stabilization policy was based on active, discretionary steps undertaken by governments (by means of fiscal policy and direct control instruments), and by central banks (by means of monetary and exchange rate policy instruments) in order to counteract or mitigate the fluctuation of business activity. It was generally accepted that the task of such policy was to maintain the economy as close as possible to the state of “full employment” with low or zero inflation rate, and without deteriorating the balance of payments [Kowalski 2001, p. 8]. The task of designing and implementing such a stabilization policy, despite its complexity, due to the multiplicity of



potential targets of economic policy and time lags, was successfully implemented in the economic conditions of the 1950s and 1960s (see Table 1 and 2).

In view of relatively minor international capital flows and the fixed exchange rates system (see Section 1), the instruments of fiscal policy played a leading role in the active and discretionary stabilization policies. In that period, virtually only the Federal Reserve (Fed) and the central bank of the Federal Republic of Germany enjoyed a formal and actual political independence, but due to the fixed exchange rate system, their functional independence was in fact limited. An important addition to the *quantitative policy* of governments and central banks of the time was the wide use of the *instruments of direct control*, of administrative and regulatory nature.

The other distinct period, after the breakdown of the Bretton Woods system, and the US 16-month recession of 1973-1975 (see Table 2), was characterized, until the first half of the 1980s, by the polarization of positions within both positive and normative economics<sup>16</sup>. Since the mid 1970s, following the reduced efficiency of the economic policy based on Keynesian recommendations, the theory of macroeconomics clearly turned back to classical economics. Positive and normative macroeconomics began to adopt the rational expectations hypothesis (REH) as defined by John Muth [Muth, 1960, Kowalski, 1987]. The gradually emerging new consensus was thus revolving around the concept of *rational expectations* and an assumption about the ability of an economic system to return autonomously to its equilibrium in response to supply and demand shocks. Consequently, the previous active role of the state in the economy, as well as its institutional foundations were reinterpreted. The new vision of the functioning of economy and the reduced role of economic policy that followed was based on the presupposition of an autonomous, self-regulatory capacity of the market system.

The rational expectations hypothesis<sup>17</sup> and the equilibrium paradigm constituted a starting point for the new description of the operation of financial, monetary, commodity, and labor markets, and the economy as a whole [Lucas, 1973]<sup>18</sup>. The issue of the systemic role of expectation formation mechanisms became the centre of attention of the theory and practice of economic policy. This approach was further strengthened by the globalization of economic processes, new information technologies, as well as mutually-related effects of information supply growth. Such combination of factors enhanced the importance of expectations. This was reflected in the increasing significance of transparency of the processes of design and implementation of macroeconomic policy and also in economy

deregulation. The tendency for the deregulation stemmed from the already emphasized belief in the power of autonomous market adjustments.

The dominance of REH, and what followed the key significance of expectations to designing and implementing of monetary policy, have also led to deep revaluations in this field. It formed an important foundation for institutional enhancement of the independent position of central banks, extension of the horizon of monetary policy, and finally popularity of the direct inflation targeting. The undisputed success of central banks in fighting inflation (at least according to its classical definition) allowed governments to reduce a wide band of economic policy goals to a total measure of stability and growth – the *output gap*. As globalization and regionalization progressed, the predominance of the liberal stream of normative economics has gradually led to abandonment of active national sectoral policies. These trends have also expressed themselves in European integration<sup>19</sup>.

One of the important features of contemporary economy is the dominance of the flexible exchange rate system. Flexible exchange rates, the already mentioned role of monetary policy, and the prominent position of central banks which gained political and functional autonomy, and thus became independent entities with clearly defined final goals, created a new environment for economic policy. Launching these processes and deepening of economic integration<sup>20</sup> gradually reduced the scope of national discretionary economic policy and increased the significance of autonomous market adjustments.

### **3. The 2008-2009 recession implications for economic theory and policy**

#### 3.1. Pre-crisis consensus in theory and practice of economic policy

In view of the evolution of the theory and practice of economic policy presented in Sections 1 and 2, it is possible to determine major economic policy pre-crisis features. Mainstream policy was founded on the assumption that despite their doubtless imperfections, financial markets and, to a smaller extent, the commodity and labor markets display both static (allocative) efficiency, as well as *Schumpeterian* efficiency. In such conditions, the basic task of economic policy authorities was to eliminate impediments to efficient operation of markets, and thus supporting the autonomous market processes, primarily through deregulation. Deregulation and in consequence gradual reduction of the modern state's functions to a set of basic responsibilities might be interpreted, on the one hand, as a deliberate broadening of the operating scope of the private sector – by allowing more

flexible adjustments to changing market conditions, and on the other hand, as a natural and logical reaction to the previously activated globalization processes. Thus, the *instruments of direct control* (see Section 1) have been recently used for implementing the concept of deregulation.

Fiscal policy was either restricted to formal rules<sup>21</sup>, or was shifted to the background. This second feature stems from the fact that in open economy conditions, the fiscal multiplier is reduced, and moreover, in currently dominating flexible exchange rates active fiscal policy is not efficient. An additional factor limiting a potential scope of fiscal expansion might be the way it is financed. Typically, budget deficits are partly financed abroad; if fiscal expansion gets an unfavorable foreign assessment it might become unfeasible or could require special risk premiums on treasuries.

After the EMU formation, the exchange rate policy within this grouping ceased to have any importance. In relations with third countries, EMU decided to apply the flexible exchange rate system. The USA has been using the flexible exchange rate system practically since 1971<sup>22</sup>. Such a combination of the main parameters of fiscal policy and exchange rate policy pushes monetary policy into the foreground. In fact, since the late 1980s, central banks, their instruments and the problem of choosing the goals have become the centre of attention of both theorists and practitioners of economic policy.

As emphasized in Section 2, central banks gradually began to play a prominent role in the institutional structure of the design and implementation of economic policy. Their position, independent of current political pressure, has been practically universally codified and socially and politically accepted. It was commonly acknowledged that their primary goal is to ensure low and stable inflation. Due to the huge scale of capital flows and the flexible exchange rate system, interest rates, particularly the open market operation rate, became the key instruments of central banks. Therefore, due to the long and variable outside lag of monetary policy and expectations as the key channel of transmission of monetary policy impulses, also in this area meant the acceptance of a certain kind of rule. It may be expressed by Taylor's rule binding the central bank rate with expected inflation and output gap [Taylor 1993 and 1999].

In view of the above findings, it might be asserted that the pre-crisis consensus about the optimum economic policy mix ensuring welfare (as its final goal) was based on:

- the postulate for deregulation – freeing market mechanisms in a maximum breadth of sectors,

- central banks' providing low and stable inflation, which was seen as a foundation for financial markets' generation of a relatively low real interest rate,
- reduction of the output gap (Okun's gap), with the assumption that the fulfillment of the first two conditions considerably increases the probability of the reduction, or even complete elimination of this gap.

### 3.2. New outlook on economic policy

With reference to the description of the American economy, as well as the global situation in the period directly preceding the events of 2007, 2008, and 2009, it is not difficult to see that the rates of the commonly measured inflation were relatively low, real market interest rates were also quite low, and the output gap gave no basis for concern. Thus, the greatest recession in the USA and Europe since the 1930s occurred despite the fact that the pre-crisis combination of parameters of macroeconomic policy and macroeconomic performance measures were close to an optimum<sup>23</sup>. On this basis, a number of conclusions may be drawn.

First of all, the assumption about efficient operation of deregulated markets proved unjustified. Particularly, financial markets displayed unexpectedly deep inconsistencies which eventually threatened the entire financial system and required the involvement of extensive public funds (financed from debt) and intervention of central banks (including unconventional quantitative easing) on an extraordinary scale. In this field, deregulation without applying necessary rules of caution and efficient supervisory institutions became one of the causes of the crisis. The financial system was the main channel for spreading negative impulses and uncertainties over the entire global economy.

Central banks, though politically and functionally independent, have failed. It was especially evident in the case of the Fed which allowed excessive loosening of monetary policy after 2001. Such policy contributed to the emergence of high overliquidity not only in the USA but in the whole world economy. China's entrance to the world supply chain of goods distorted the standard image of inflation, making it harder to diagnose the actual inflation situation, as well as to prepare reaction scenarios. Despite signals from theorists, central banks did not redefine the way inflation was gauged, and did not include indexes measuring the inflation pressure in financial assets in the set of actual warning signals.

Thus both the theoretical foundations of the economic policy, and the pragmatic rules for decision-making in central banks, main regulators of financial markets and supervisory

and rating institutions proved inappropriate to the actual complexity and interrelationships between national and international segments of the financial system.

## **Conclusion**

The current stage of globalization calls for a new outlook on the institutional solutions with respect to the design and implementation of economic policy. Surely, the foreground is now occupied by the need to revise current solutions regarding information flows and public regulation and supervision of economic operations. Thus, the pre-crisis standard approach to qualitative economic policy requires revision.

The efficiency of counteracting such broad economic disruptions we had to and still have to face, will improve if we develop new early warning signals about growing inflation pressure and in particular accumulation of imbalances. Especially the latter, due to the development of financial engineering, are not necessarily quick to be reflected in the prices of financial assets. An important condition for the improvement in the efficiency of this policy is further institutionalization of the coordination of preventive actions of central banks and financial supervisory institutions.

The scale of fiscal interventions rescuing the threatened financial and non-financial institutions has led first to the increase in budget deficits, and then to the rise of the public debt. This way, fiscal policy returned as a subject of special interest of both theorists and policymakers. Basically, the conditions for fiscal policy implementation and its prospective efficiency will not change significantly. However, the scale of deficits and the leaping growth of public debt will constitute an important factor limiting room for maneuver in economic policy.

It has to be emphasized that individual countries will continue to face shrinking scope for selection of instruments of discretionary quantitative economic policy. Therefore, the rank of key success factors and major distinguishing marks in the area of their international competitiveness should include qualitative economic policy. It should particularly feature the ability of governments and regulatory bodies to create and maintain a high quality of institutional environment, flexible labor market and the ability to create conditions promoting innovativeness.

## Endnotes

---

<sup>1</sup> In the paper, the author refers to his earlier publications, including [Kowalski 2009] and [Gorynia & Kowalski 2009].

<sup>2</sup> In this period, most countries imposed constraints on capital flow.

<sup>3</sup> *Quantitative economic policy* involves introducing changes to numerical values of fiscal or monetary policy instruments in given institutional conditions. *Qualitative economic policy* denotes designing and implementing changes in institutional conditions, such as liberalisation of entry rules, or statutory decisions ensuring political and functional independence of central banks. The terms were introduced by J. Tinbergen. C. f. [Tinbergen 1955].

<sup>4</sup> As shown in Table 2, in the post-war period in the USA, an average contraction phase lasted 10.8 months, and average expansion lasted over 60 months. It should be emphasised that the amplitude of fluctuations of the post-war cycles was incomparably lower than before 1945.

<sup>5</sup> In the 1990s, after the phase of rapid growth in 1960-1980, Japan faced structural barriers. In consequence, its economy fell into secular stagnation which lasted until the 2000s. The outbreak of the Asian crisis in 1997 was an important global event. C. f. [Kowalski 1997] and [Eichengreen 1999].

<sup>6</sup> Among the regional integration groupings, the emergence and development of the European Union enjoyed the greatest success. Other major regional trade agreements of this type include NAFTA, MERCOSUR, and ASEAN.

<sup>7</sup> It is worth noting that the influence of excessive money supply in the period before the current phase of globalisation (characterised by the presence of China in the global circulation of goods and capital) would have resulted in economic overheating in the classical sense, and would manifest itself by an increase in prices (CPI and PPI). Such a scenario would have been an easy and typical task for central banks and fiscal authorities. As China and other quickly-industrialising economies came into world play, their production capacity “smoothed and flattened” the global supply curve significantly modifying the supply and demand conditions in the entire world economy.

<sup>8</sup> It is estimated that as a result of the (primarily Chinese) high demand for American treasuries and other financial assets, the financial market interest rates in the USA in 2004-2005 were about two percentage points below the level they would have reached without such considerable influx of capital. C. f. [World Report, 2005; The Great Thrift Shift, 2005].

<sup>9</sup> In the global economy the process occurred with a certain time lag in comparison with the USA.

<sup>10</sup> In 2006, the share of the construction industry in the GDP generation reached its highest level in 50 years.

<sup>11</sup> Data by IMF and Index Mundi.

<sup>12</sup> C. f. e. g. [Fogli and Perri 2006] and [Blanchard, Dell’Ariccia and Mauro 2010].

<sup>13</sup> This Section draws on my earlier publications, namely the paper presented at the EMU conference [Kowalski 2010], and [Gorynia & Kowalski 2009].

<sup>14</sup> E. g. works of W. Brainard, S. Turnovski, R. Theil, and R. Pindyck.

<sup>15</sup> C. f. T. Swan, R. Mundell.

<sup>16</sup> In the first dimension, it concerned the diagnosis and cause-effect mechanism of the recession and stagflation of that time, in the second, it concerned the scale and scope of the autonomous capacity of the market economy to return to balance.

<sup>17</sup> In parallel to REH, studies were conducted over the behaviour of business agents, assuming their *bounded rationality* (as defined by A. Simon). C. f. Kowalski [2002]. It implies that the process of expectation formation is slower than the REH assumes, and that it may be burdened with errors. This direction of studies remained outside mainstream macroeconomics, but finally it was used and developed within finance and in *behavioural economics*.

<sup>18</sup> A breakthrough in the philosophy of modelling changes of economic policy was the publication by R. Lucas, [Lucas, 1973]. Gradually, under the influence of Lucas’s arguments and progress in econometric modelling of macroeconomic processes based on microeconomic foundations, DSGE models began to prevail.

<sup>19</sup> See for example the EU competition policy, implementation of the Single European Act, and finally the Economic and Monetary Union.

<sup>20</sup> That is, the establishing of the EMU in 1999.

---

<sup>21</sup> For example convergence criteria as a necessary condition for joining the Economic and Monetary Union, or Stability and Growth Pact as a set of rules for the EMU members. Interestingly, the requirements concerning deficit and level of public debt in relation to GDP formally apply to all EU member states.

<sup>22</sup> Among the major economies, only China maintains a system of fixed exchange rates with elements of regular correction towards appreciation.

<sup>23</sup> See Blanchard et al. 2010, Blanchard & Cottarelli 2010, and Blinder [2010]

### **Bibliography**

- Blanchard, O., Dell’Ariccia, G., Mauro, P., 2010. *Rethinking Macroeconomic Policy*, IMF Staff Position Note, February 12.
- Blanchard, O., Cottarelli, C., 2010. *Ten Commandments for Fiscal Adjustment in Advanced Economies*, iMFdirect, posted on June 24.
- Blinder, A.S., 2010. *The Practice of Monetary and Fiscal Policy*, The Wall Street Journal, 25 October.
- Eichengreen, B., 1999. *The European Economy Since 1945. Coordinated capitalism and Beyond*, Princeton University Press, Princeton and Oxford.
- Findlay, R., O’Rourke, K.H., 2004. *Power and Plenty. Trade, War, and the World Economy in the Second Millennium*, Princeton University Press, Princeton and Oxford.
- Fogli, A., Perri, F., 2006. *The “Great Moderation” and the US External Imbalance*, NBER Working Paper Series, WP no. 12708.
- Frenkel, J.A., ed., 1998. *The Regionalization of the World Economy*, NBER, The University of Chicago Press, Chicago and London.
- Geyer, H.S. ed., 2006. *Global Regionalization. Core Peripheral Trends*, Edward Elgar, Cheltenham
- Gilpin, R., 2000. *The Challenge of Global Capitalism*, Princeton University Press, Princeton.
- Gorynia, M., Kowalski, T., 2008, *Globalne i krajowe uwarunkowania funkcjonowania polskich przedsiębiorstw*, Ekonomista, no. 1.
- Gorynia, M., Kowalski, T., 2009. *Nauki ekonomiczne a kryzys gospodarczy*, Studia Ekonomiczne, Economic Studies, no. 3-4.
- (The) Great Thrift Shift, 2005. Survey, World Economy, The Economist, September 22.
- Hitiris, T., 2003. *European Union Economics*, FT-Prentice Hall, Harlow.
- Kirschen, E.S., et al., 1964. *Economic Policy in Our Time – General Theory*, vol. 1, North-Holland Publishing Company, Amsterdam.

- 
- Kowalik, T., 2002. *Kapitał globalny a tendencje egalitarne i antyegalitarne*, in: Liberska B. ed., *Globalizacja. Mechanizmy i wyzwania*, PWE, Warszawa.
- Kowalski, T., 1987, *Nowa klasyczna makroekonomia a polityka stabilizacji gospodarczej w kapitalizmie*, *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, no. 2.
- Kowalski, T., 1999. *Azjatycki kryzys finansowy – próba interpretacji*, Penetrator. Nasz Rynek Kapitałowy, marzec.
- Kowalski, T., 2001. *Proces formułowania oczekiwań a teoria cyklu wyborczego. Implikacje dla polityki gospodarczej*, Wydawnictwo AE w Poznaniu, Poznań.
- Kowalski, T., 2002. *The Simonian Bounded Rationality Hypothesis and the Expectation Formation Mechanism*, *Poznan University of Economics Review*, vol. 2, no. 1.
- Kowalski, T., 2009. *Makroekonomiczne uwarunkowania kryzysu 2008-.... . Odpowiedzialność i wyzwania wobec banków centralnych*, paper presented at a conference on ‘*Polityka Pieniężna w Dobie Kryzysu* (z okazji X-lecia istnienia Katedry Teorii Pieniądza i Polityki Pieniężnej)’, University of Economics in Poznaniu, 26 November, 2009.
- Lucas, R., 1973. *Econometric Policy Evaluation: A Critique*, w: *The Philips Curve and Labor Markets*, K. Brunner, A.H. Metzler eds., Oxford University Press, Amsterdam.
- Marglin, S.A., Schor, J.B., eds., 1990. *The Golden Age of Capitalism. Reinterpreting the Postwar Experience*, Clarendon Press. Oxford.
- Muth, J., 1960. *Rational Expectations and the Theory of Price Movements*, *Econometrica*, July, vol. 29, 3.
- Olson, M., 1996. *The Varieties of Eurosclerosis: the Rise and Decline of Nations since 1982*, w: Crafts, N., Toniolo, G., 1995. *Economic Growth in Europe since 1945*, CEPR, Cambridge University Press, Cambridge.
- Pelkmans, J., 2006. *European Integration. Methods and Economic Analysis*, the Third Edition, FT-Prentice Hall, Harlow.
- Taylor, J.B., 1993. *Discretion versus Policy Rules in Practice*. *Carnegie-Rochester Conference Series on Public Policy* 39, December.
- Taylor, J.B. (ed), 1999. *Monetary Policy Rules*. Chicago: University of Chicago.
- Taylor, J.B., 2010. *Getting Back on Track*, *FR Bank of St. Review*, vol. 92, no. 3.
- Tinbergen, J., 1955. *On the Theory of Economic Policy*, North-Holland Publishing Company, Amsterdam.
- Tinbergen, J., 1956. *Economic Policy. Principles and Design*, North-Holland Publishing Company, Amsterdam.