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# GLOBAL FINANCIAL IMBALANCES IN SAVINGS AND INVESTMENTS

*У статті розглянуто проблеми глобальної фінансової нерівноваги в умовах світової фінансової кризи. В межах даної статті в основу аналізу причин виникнення глобальної фінансової нерівноваги покладено два основних підходи щодо причин їх виникнення: (і) міжнародна асиметрія між попитом та пропозицією на товари; (іі)міжнародна асиметрія в попиті та пропозиції на резервні активи. Автором запропоновано план дій щодо врегулювання проблеми глобальних фінансових дисбалансів у майбутньому.*

*The article deals with the problem of global financial imbalances during the world financial crisis. In order to analyze the causes of the global financial imbalances author exploited two dominant approaches: (i) international asymmetries in the supply and demand for goods; (ii) international asymmetries in the supply and demand for reserve assets. Action plan as for global financial imbalances issue resolution is provided.*

**Key words:** global economy, global imbalances, savings, investments

Introduction. Since the outbreak of the world financial crisis, global imbalances have taken central stage in the debate on the causes of the financial meltdown and the global economic outlook [1].

At the risk of over-simplifying, we can distinguish two basic views. The first approach emphasizes international asymmetries in the supply and demand for goods – some countries (with the US at the top) spend too much, while others (e.g. China) spend too little. For the most proponents of this view, global imbalances represent an unsustainable phenomenon, whose eventual correction must entail US trade adjustment and a major depreciation of the dollar [1].

The proponents of the second approach rely on international asymmetries in the supply and demand for assets – in particular, pent-up demand by international investors for rich-country (and especially US) assets [1]. Ricardo Caballero, Professor of Economics at MIT, also advocates the second approach and considers the fundamental problem of the current global macroeconomic and financial imbalances to be centered in a shortage of safe assets [3].

The impeccable logic of international financial accounting assures the current-account balance is both a goods phenomenon and an asset phenomenon. After all, if a nation buys more goods and services from the rest of the world than it sells to the rest of the world, there must be an offsetting of assets. The goods-view of global imbalances asserts that it is a goods trade driving asset trade, while the asset-view asserts that the asset trade drives the trade of goods [1].

Generally speaking, global imbalances are disparities between savings and investment in the major world economies. They are reflected in large and growing current account imbalances

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[2]. Financial imbalances, although to a lesser extent, also contributed to this impartial feature of the contemporary world economic system.

Commodities market developments played central role in current account surpluses accumulation in emerging markets and oil-exporting countries of Middle East and North Africa. The remarkable increase in the relative prices of commodities and minerals during the early 2000s resulted in further increases in net savings of oil and commodity exporters, thereby reducing the real interest rate (Figure 1).

The lower cost of risk, and lower interest rate, induced larger current account deficits by counties that were restrained from borrowing binges at times of higher interest rates, resulting in gradual build-up of growing external liabilities of OECD countries (Portugal, Spain, Greece, US, etc.). In contrast, experience of countries is well-supplied with examples of nations where inflows of capital and easy access to borrowing have not succeeded in delivering sustainable growth, and in due course led to crisis (Argentina in the 1990s, and Spain and Greece being the latest example) [3].

The combination of financial deregulation, substantial financial innovation in financial markets, proliferation of growing leverage in the housing market, and floating interest-rate mortgages induced higher real estate demand in the US, thereby appreciating the US real estate evaluation, and encouraging lower saving by households that treated housing capital gains as permanent (Figure 2) [3].

The inflows of capital to the US prolonged the period of low saving in the US, and magnified the duration of the real estate appreciation, deepening the global crisis induced down the road by the growing weaknesses in the US housing market in 2007. In this new environment, profits were determined by the volume of mortgages initiated, and not by its quality [3]. Basically, banks' mortgage lending business shifted from methodology targeted at minimizing the risk of loan non-repayment, towards profit maximization with mostly neglecting the return risk.

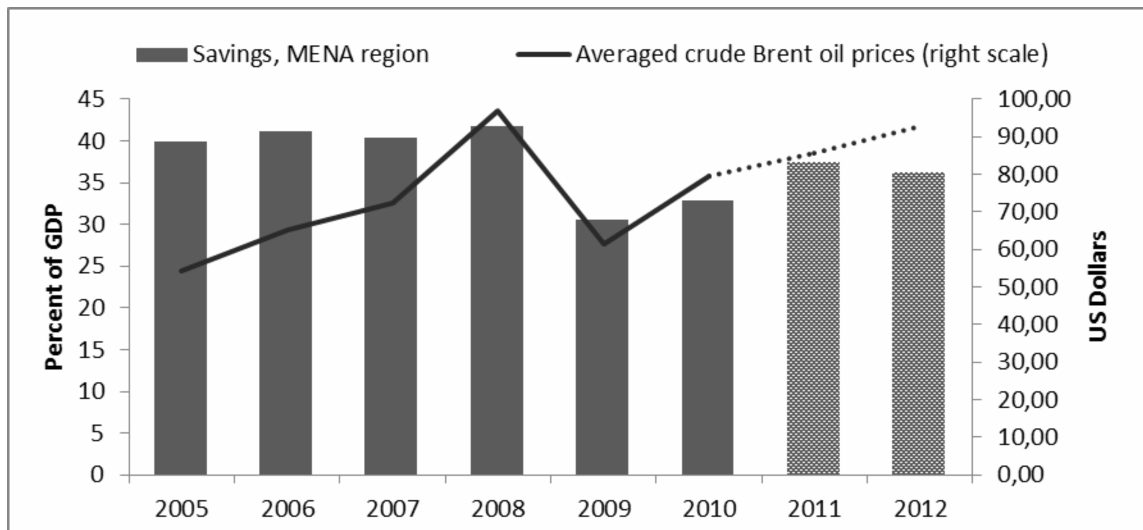


**Figure 1.** Annual crude Brent oil prices and savings in Middle East and North Africa
*Source: author's compilation, World Economic Outlook 2010 data, BP Statistical Review of World Energy 2010*
*Note: 2011-2012 savings rates are IMF projections; 2011-2012 oil prices are author's projections*

A large amount of mortgage lenders developed management compensation schemes supported by large bonuses linked to the amount and volume of mortgages provided to clients. Financial deregulation combined with constant growing rate of both scope and scale of innovative financial products designed spurred financial institutions to increase risk appetites.

The Fed's cheap money policy in the late 1990s and early 2000s was also among the causes of risk appetites.

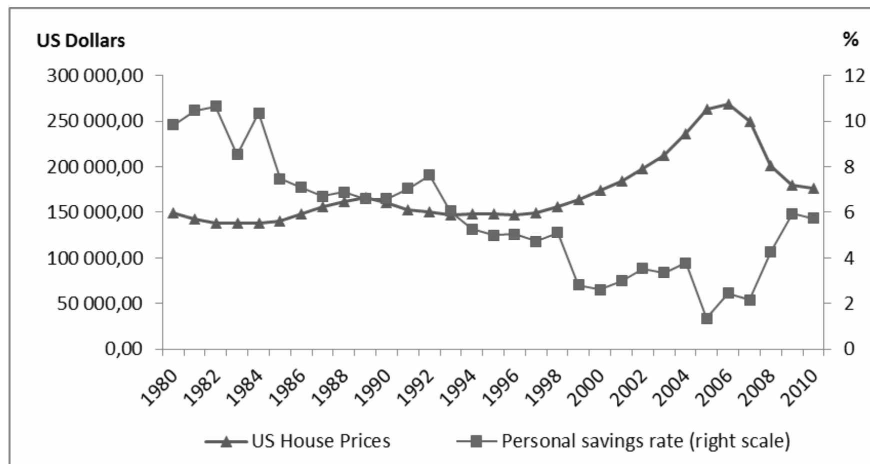


**Figure 2.** Average US house prices and average personal savings rate, 1980-2010
*Source: U.S. Department of Commerce: Bureau of Economic Analysis, Federal Housing Finance Agency, Standard & Poor's*

Low interest rates are mainly responsible for fueling a debt-driven consumer boom, and sucking in record volumes of imports, many from the newly industrializing economies of Asia. Funding all this required issuing huge volumes of debt, much of it securitized against dubious mortgages and consumer debts, and sold to foreigners when domestic savings proved inadequate (Figure 3).

The major U.S. debt buyers were emerging markets with China taking the lead. These were surplus countries, resilient on export-led growth. Fed Chairman Ben Bernanke and his adherents blame emerging markets and China in particular for the U.S. growing debt burden. In their view, China's reliance on export-oriented growth, refusal to allow the renminbi to appreciate, accumulation of foreign reserves, and recycling of surplus foreign exchange back into the market for U.S. government bonds and mortgage-backed securities created a "global savings glut". This glut artificially reduced global interest rates and created the perverse incentives for an unsustainable build-up of debt in the United States [4].

While it is tempting to blame China's "mercantilist" trade policies for the crisis, China is only the latest in a long line of countries the United States has blamed for its own trade and financial problems (Germany and France in the 1960s, Japan in the 1970s and 1980s, the Asian Tigers in 1990s).

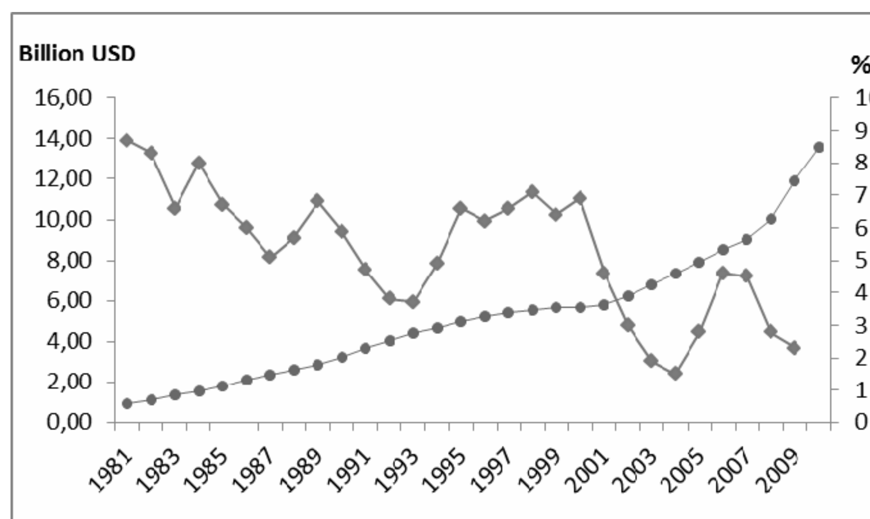


**Figure 3.** US gross debt and US real interest rates, 1981-2009
*Source: US Treasury, World Bank Data*

It is possible the rest of the world has been consistently wrong, and the United States has been consistently right. But it seems more likely there is something that makes the United States uniquely prone to excess domestic spending and running large trade deficits that in put pressure on the country's external position.

There are several candidates for the source of American exceptionalism. But perhaps the most obvious cause is the role of the dollar as the global reserve currency. The United States has run larger budget and current account deficits than most other countries simply because as the issuer of the principal reserve currency it can.

The positive side has been the ability to borrow more cheaply and in larger amounts than other countries. The dark side has been a steady accumulation of internal and more importantly external debt that is now a source of enormous financial instability [4].

Among one of the reasons why U.S. has constantly increasing current account deficit is its role as the marginal reserve asset provider for the global financial system. Triffin Dilemma explains it more precisely. Issuing countries of reserve currencies are constantly confronted with the dilemma between achieving their domestic monetary policy goals and meeting other countries' demand for reserve currencies. On one hand, the monetary authorities cannot simply focus on domestic goals without carrying out their international responsibilities; on the other hand, they cannot pursue different domestic and international objectives at the same time [5].

As opposed to the countries from western hemisphere characterized by current account deficits, emerging Asian economies can be characterized by current account surpluses and high foreign reserves accumulation (Figure 4).

The roots of today's current account surpluses in emerging East Asian economies go back to the Asian crisis of the late 1990s. The lessons of that particular crisis were well learnt by Asian economies and resulted in revising of their monetary and external policies, which helped them to more or less smoothly pass through the crisis of 2008-2009. Emerging East Asian central banks in both the crisis-hit countries (Indonesia, Korea, Malaysia, the Philippines, and Thailand) and other countries (China, Singapore, and Taiwan) have accumulated foreign exchange reserves for the following reasons: (i) to be prepared for another capital account crisis characterised by massive reversals of short-term capital that can trigger both a currency collapse due to the drain on foreign reserves and a banking crisis due to the sharp increase in external liabilities on the balance sheets of banks and firms; and (ii) to maintain competitive exchange rates in order to sustain the export-led growth of their economies. The first objective was more important after the crisis, and the second objective has been more or less persistently important [6].

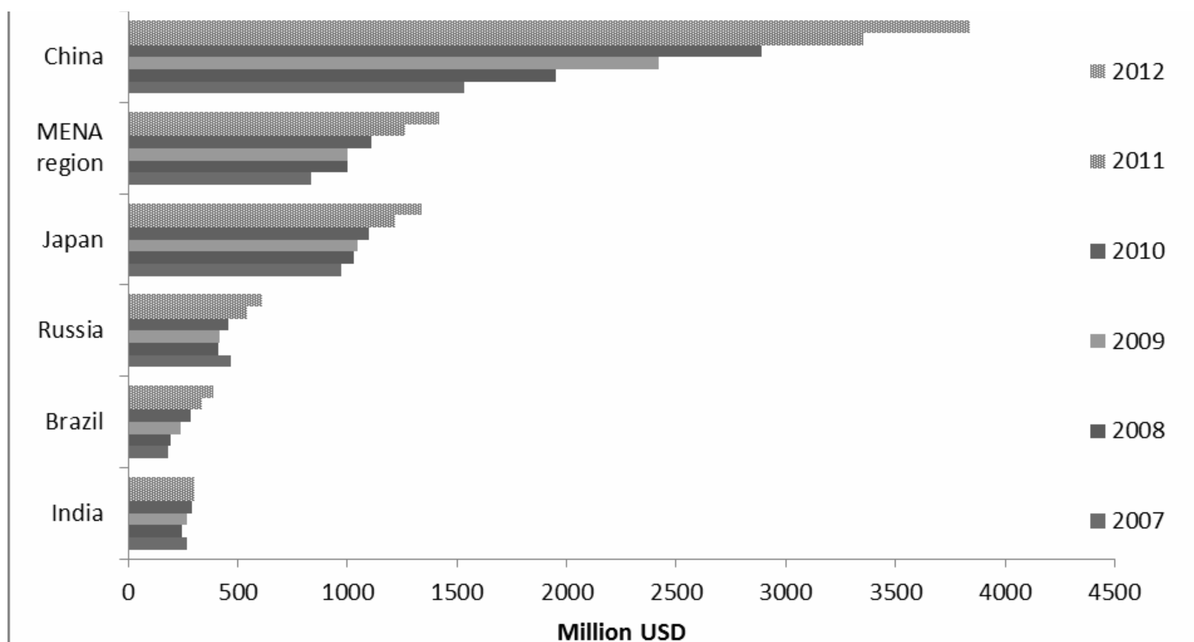


**Figure 4.** Foreign reserves accumulation by selected countries and regional groups
Source: World Economic Outlook 2011

Japan has also accumulated reserves through foreign exchange market intervention, although for a different reason. It has sought to fight price deflation by preventing the yen from appreciating too much [6]. Moreover Japan is more dependent on export-driven growth than any other country in the world. It is the reason for the Central Bank of Japan accumulates large amounts of foreign reserves to manage its exchange rate, keeping yen devalued.

Recent devastating earthquake which took place in Japan led to yen appreciation and will definitely harm Japanese exports and GDP growth in the first half of 2011 (Figure 5). Japan used a total of 692.5 billion yen ($8.6 billion) in foreign exchange intervention in March.

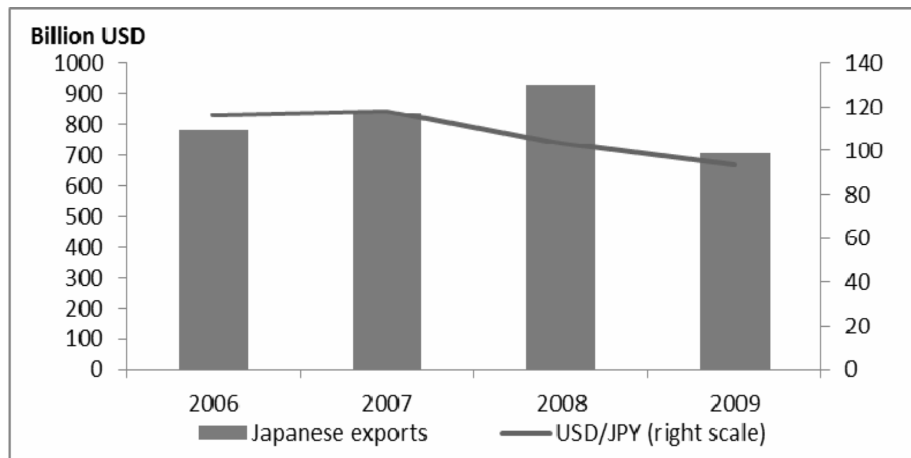


**Figure 5.** Japanese exports and USD/JPY exchange rate, 2006-2009
*Source: World Trade Organization data, IMF data*

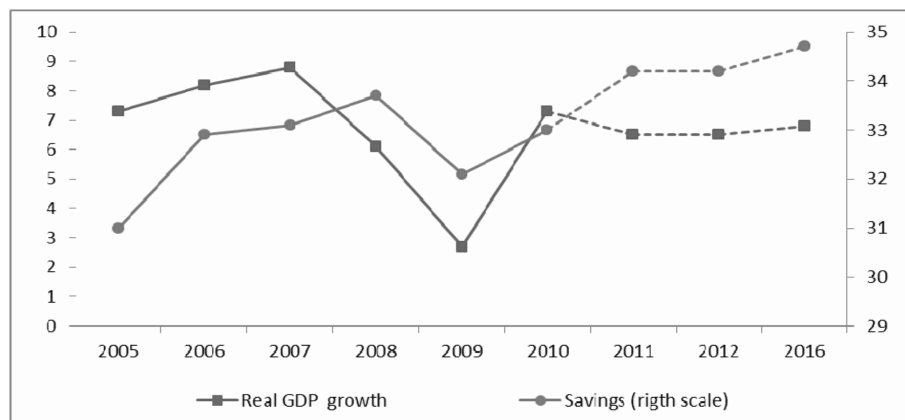


**Figure 5.** Real GDP growth and savings in Emerging and Developing Economies
Source: IMF data
*Note: Real GDP growth illustrates year-on-year percentage change; savings is percentage of disposable income*

Besides large surpluses and reserve accumulation East Asian emerging markets contribute to global financial imbalances via high propensity to savings. "Excessive" private savings in the EMEs (emerging markets) are driven by high rate GDP growth in these economies (Figure 6).

Living standards improve at a much slower pace than households' earnings grow, resulting in private savings upsurge. Still it is not the only factor inducing higher savings rate in emerging economies. The weak social protection system of many of these countries forces individuals to save an inordinately large fraction of their income for retirement, or to protect themselves from the risk of unemployment [7].

On the other side, economic growth in the emerging markets is possible primarily to undervalued real exchange rates which preserve export competitiveness [1]. The best way to achieve this is by compressing domestic spending, particularly consumption, which inevitably leads to persistent current-account surpluses and foreign reserve accumulation [8; 9]. Surpluses and savings are exposed to inflation, which prompt these countries to invest them in safety-haven assets like U.S. Treasuries. There two motivators that drive trade direction and capital flows from the EMEs to the U.S.:

1. U.S. is the largest importer of goods and services in the world – the world's largest market in terms of value [10].

2. U.S. obtains advanced financial market which supplies all types of financial services and products for individuals, corporations, institutional investors and governments. Moreover, U.S. Treasuries are considered as benchmark safety assets because the U.S. government has never defaulted on its debt. By the way, U.S. is the major world's reserve currency supplier. It explains why a large proportion of Asian reserves were invested in US dollar assets.

These included particularly US Treasuries, but also, via Asia's sovereign wealth funds, corporate assets. The resultant capital inflow into the US and global markets, together with the US Fed's easy money policy, kept US and world interest rates low, funding ever increasing US and some European government budget deficits and household debt. Cheap money also fuelled "financial innovations" such as subprime mortgages and other risky assets aimed at securing higher returns for investors and their financial intermediaries, which subsequently led to crisis [9].

The capital flow from Asia (and other e.g. commodity-exporting economies) also propped up the dollar and depressed Asian currencies, maintaining Asian export competitiveness, current account surpluses and reserve accumulations, while expanding US current account deficits and national indebtedness [9].

The financial crisis brought about a reversal in the large and growing global imbalances that characterized trade in the years that preceded it. In part, this is purely mechanical. The large drop in trade that occurred in 2009 will cause trade imbalances to retreat if it affects exports and imports proportionately. This suggests that if conditions improve, the worrisome pattern of growing imbalances is likely to re-emerge [11].

Part of the contraction in imbalances is not mechanical but is due to rebalancing of imports and exports. Rebalancing can happen in three different ways.

1. both imports and exports decline, and the larger flow decreases by relatively more than the smaller flow;

2. the larger flow declines and the smaller flow increases;

3. both flows expand, and the large flow expands by relatively less than the smaller flow.

The first and second suggest that trade growth may stagnate in the near term as trade flows adjust, while the third offers a future with both positive trade growth and declining imbalances [11].

Countries with large trade deficits have reduced imports to a far greater extent than exports, while countries with large surpluses have reduced exports by relatively more [12]. This type of adjustment is more likely to be sustainable, as it reflects changes to rates of savings and investment [11].

Countries with sustained, significant external surpluses have to search and strengthen domestic sources of growth.

At the international level, governance and other reforms are needed to reduce the incentives of some countries to accumulate foreign exchange reserves beyond what is reasonably needed [13].

International financial system has to develop a new diversified mechanism of reserve currency supply. Theoretically an international reserve currency should (i) be anchored to a stable benchmark and issued according to a clear set of rules, therefore to ensure orderly supply; (ii) its supply should be flexible enough to allow timely adjustment according to the changing demand; (iii) such adjustments should be disconnected from economic conditions and sovereign interests of any single country. The first two functions are perfectly carried out by the major international reserve currency supplier – U.S. monetary authorities. However, Triffin Dilemma,

which is directly tailed to the third function mentioned above, has to be resolved. Dr. Zhou Xiaochuan, Governor of the People's Bank of China, pointed out that Triffin Dilemma may be resolved by substituting the role of the U.S. dollar as reserve currency for the SDR. As the result the contradiction between achieving their domestic monetary policy goals and meeting other countries' demand for reserve currencies will be settled [5].

Measures to promote private sector investment and to reduce personal and corporate savings will need to complement any fiscal retrenchment in surplus countries. Conversely, measures to increase savings have to be adopted in deficit countries. More generally, governments will have to decide how much priority to attach to reducing imbalances compared to other macroeconomic and structural objectives [13].

Obstfeld and Rogoff reach the same conclusion using a multi-country, inter-temporal, general equilibrium model [14]. They state that most theoretical and empirical models (including theirs) indicate that a 10 percent depreciation of the dollar would be associated with a reduction in the US current account deficit of around one percent of GDP. They thus argue that reducing the current account imbalance to a sustainable magnitude would require not just a dollar depreciation but also a change in the level of expenditures (e.g. a decrease in consumption in the US) [6].

The US can reduce its budget deficit. Increases in the budget deficit were the proximate cause of the large drop in national saving relative to investment after 2001. A decrease in the budget deficit could help to close this saving-investment gap [6].

To conclude, financial globalization has relaxed the constraints on countries in financing their savings investment imbalances, thus allowing larger imbalances to be sustained for longer. This is in principle welcome in so far as it permits more efficient adjustment over time, and smoothes the impact of economic shocks on business activity and consumption. But it also poses major new challenges for creditors and debtors, both public and private sector [11].

While imbalances are typically viewed as a macroeconomic phenomenon, their persistence in recent years suggests that there may be underlying structural features of national economies and the international financial system that influence their magnitude [12].

Whereas the adjustment process from a trade perspective is moving in a positive direction, some risks remain. Among these are a return to low savings in the US and a reemergence of large imbalances. In China, there is a danger that the import strength is temporary, as relatively cheap natural resources are purchased for future use, and domestic consumption does not expand in a sustainable way. Without these two countries participation, the new pattern of trade cannot take an effect.

A market-driven exchange rate in China would help reduce these risks. A real appreciation of the renminbi would make imports more affordable and exports less competitive, and China's large trade surplus would decline. China has already facilitated some real appreciation during the crisis through fiscal stimulus and ultimately rising wages and prices [15]. A gradual move to more exchange rate flexibility will keep domestic demand on track and promote stable prices. This would be a win-win for both China and the rest of the world.

Despite the fact that some policymakers see protectionism as a tool to cope with current account imbalances, it is highly unlikely to be effective. Unless trade barriers affect savings and investment, they cannot alter the trade balance. In a similar vein, more trade liberalization will not lead to expanding imbalances. As shown in Freund's research, trade has expanded steadily with and without growing imbalances [11]. Opening markets to goods and services facilitates the movement of resources to their most productive uses, raising income levels. It also raises income growth by expanding returns to investment in high-productivity firms and sectors. It is impor-

tant that efforts to liberalize – unilaterally, multilaterally, and regionally—are kept on track during this period of global uncertainty.

As it was mentioned above, financial pundits have differing interpretations about the origin of the imbalances. It leads to the two different mechanisms to cope with global financial imbalances. On one side the solution lies in a long-term tightening of U.S. credit conditions and higher domestic savings. On the other side, Bernanke and his supporters argue the solution is for China to stimulate domestic demand, appreciate the renminbi and reduce reserve accumulation. In reality, it takes both a lender and a borrower to create a debt crisis; the solution to the crisis lies in balanced adjustments on both sides [4].

Whatever the approaches are, global financial community is to struggle for a more balanced development of the world economy. In today's post-crisis economic environment it is still difficult to forecast whether global financial imbalances are going to vanish or return in the next two or three years. The answer seems to be not that explicit. The future of global imbalances depends on the developments in both real and financial sectors of the global economy. Nevertheless, the evolution of these economic processes is hard to predict. Although we can't be precise in the direction of global imbalances developments, we can definitely think of the two scenarios of global imbalances developments.

According to the first scenario the global imbalances will return in the upcoming years, as economies demonstrate the return of growth. Global financial crisis has demonstrated the effectiveness of the self-insurance strategy pursued by emerging markets. These markets managed to withstand the global storm better than the rest due to large amounts of foreign reserves accumulated. The success of this strategy may embolden other countries to follow suit.

Moreover, emerging markets will pursue the goal of protecting their savings from inflating. As a result they will very likely continue to demand large volumes of financial assets from more developed markets contributing to the "savings glut" [1].

The second scenario implies gradual vanish of global financial imbalances. Although less likely in the short run it is more likely to take place in a long-term. In order to make the scenario work, emerging economies have to refocus on inward-looking growth. In general, an orderly rebalancing of emerging economies with strong external positions and sound macroeconomic frameworks would have to involve an upfront appreciation of the exchange rate [16].

The strengthening of social safety nets which is ongoing in China and other emerging countries is likely to bring down unusually high household saving rates attributable to the EME's. Reforms undertaken by the governments of the emerging markets are aimed to accelerate the development of bond and equity markets, and improve corporate governance. These reforms are expected to reduce corporate sector incentives to retain earnings and thus would bring down corporate saving rates.

Nevertheless, we have to admit the fact that global imbalances issue remains unresolved. There is a lack of countries that can provide financial assets that can be relied on as a store value. German government bond market could become one; however it is not large enough to satisfy the hunger of emerging markets for risk-free reserves [17]. Some analysts assume China could become a regional risk-free reserves supplier for Asian countries in the meantime, while it looks hardly feasible or at least far-fetched for the time being as China lacks developed and sizeable capital markets. Moreover, there are embedded political stability risks in the long run. Therefore, we assume that the world's dependence on the U.S. dollar will continue at least a decade ahead [17].

On the way to strengthening world economic sustainability we should remember that global economy is not a stationary thing. It is constantly moving, inheriting a featured development of a particular time, still never being unidirectional.

The pace of reserve accumulation has far outstripped GDP growth in emerging economies. China now holds more than 50 percent of GDP in foreign currency reserves–up from less than 10 percent fifteen years ago. In South Korea and Russia, the ratio stands at around 35 percent; in India and Brazil it is above 20 percent [17]. This appetite for reserve accumulation clearly distinguishes the latest round of catching up in the global economy from previous ones. Germany and Japan in the 1960s and 1970s grew their reserve holdings at approximately the same rate as output, so that reserve levels remained constant at about 5 percent of GDP, or one-tenth of China's current levels [17].

In order to avoid large global imbalances in the nearest future policymakers have to take actions.

- Strive to make the economic structure of both advanced, emerging and developing economies more balanced.
- Deficit countries and U.S. government in particular have to tighten long-term credit conditions and focus on higher domestic savings.
- Simultaneously, emerging markets with China at head have to stimulate domestic demand, increase social insurance, appreciate the national currencies and reduce reserve accumulation.
- Global economic community has to revise the role of the US as the major reserve assets supplier to the global financial system. It leads to the Triffin dilemma: inconsistency between achieving their domestic monetary policy goals and meeting other countries' demand for reserve currencies. New international reserve currency has to (i) be anchored to a stable benchmark and issued according to a clear set of rules, therefore to ensure orderly supply: (ii) its supply should be flexible enough to allow timely adjustment according to the changing demand: (iii) such adjustments should be disconnected from economic conditions and sovereign interests of any single country.

So as to bring the aforementioned recommendations to life world policymakers have to combine their efforts and cooperate moving towards a more balanced world economy. All in all, the global financial crisis is a good time to address country-specific and global systemic risks on the way to strengthen the world economic sustainability.

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