

MPRA

Munich Personal RePEc Archive

Competitiveness, Economic Freedom and Real Exchange Rate. Evidence from Romania

Herciu, Mihaela and Toma, Ramona
Lucian Blaga University of Sibiu

05. December 2006

Online at <http://mpra.ub.uni-muenchen.de/1722/>

MPRA Paper No. 1722, posted 07. November 2007 / 01:56

Competitiveness, Economic Freedom and Real Exchange Rate. Evidence from Romania

Mihaela Herciu, Ramona Toma
"Lucian Blaga" University of Sibiu, Romania

Abstract:

In the new context of European Integration, Romania has to improve some important macroeconomic indicators, such as: competitiveness, economic freedom and real exchange rate for a sustainable economic growth. Many authors emphasize that competitiveness and economic freedom affects economic growth through stimulating investment and business environment. The equilibrium exchange rate is crucial as it directly influences external competitiveness, especially through export prices.

For Romania, the competitiveness can be improved through the economic freedom growth and the real exchange rate appreciation. But this appreciation must be accompanied by a rise in productivity and in the quality of the products offered on the external markets in order not to affect Romania's external competitiveness.

Key words: competitiveness, economic freedom, real exchange rate, Romania

JEL Classification: F31, M21, O11

The study continues our researches in this domain being necessary because the lack of Romanian analyses focused on the correlation between the competitiveness, economic freedom and real exchange rate. In this context, our study can provide a Romanian point of view which can be used for international comparisons. The Romania position in the international country top is not a favourable one: on the second half of the top comparing with the rest of the world and on the last comparing with EU-25. This unfavourable position will be influenced after the Romania entry into the European Union in January 2007. The European and national authorities can be able to offer and monitor credible policies for catching up process.

The economic integration and the political disintegration have characterized the world economy in the last part of the 20th century. Many specialists (Knack, S., Azfar, O., 2003) underline that changes of such proportion have had a meaningful impact on the world well-being. They are thinking that the consequences of the growing trade force in the smaller countries can entail the improving of ruling quality.

On the other hand (Grubaciuc, S., 2002), the most powerful argument in favour of trade liberalization is to allow importation of rational relative prices for tradable goods, which would, in turn, expose domestic firms to greater competition, forcing them to reduce costs and improve efficiency.

The trade liberalization in Romania assists the country in determining its comparative advantages in the world markets. After the January 2007, the competitive pressures will increase, helping us to reduce the bias towards import substitution.

The literature on competitiveness supplies a wide variety of definitions of the term. In the Annual Competitiveness Report 2003 there is a definition that is at once simple to understand, while simultaneously incorporating those key elements which combine to produce a competitive economy: *"Competitiveness is the ability to achieve success in markets leading to better standards of living for all. It stems from a number of factors, notably firm level competitiveness and a supportive business environment that encourages innovation and investment, which combined lead to strong productivity growth, real income gains and sustainable development"*.

Michael Porter (Porter, M., 2005) considers that competitiveness is not a zero-sum game between countries. All countries can get more competitive because all countries can become more productive. There's not a fixed pool of demand in the world that countries are competing to serve. There is almost an unlimited amount human need for health care, for goods, for services, for entertainment. Also for Romania, the increasing productivity determines the competitiveness growth without affecting the competitiveness of other countries.

One of the most important indicators of external competitiveness is the equilibrium real exchange rate. Although it is widely accepted (Meese, R. A., Rogoff, K., 1983) that providing a precise estimate of the equilibrium level of exchange rates and thus of the over or under valuation of a currency is far from straightforward, a number of empirical models based on economic fundamentals have shown that they can track the evolution of the actual exchange rate rather well.

The specialised literature offers now different studies which analyse the correlation between competitiveness and real exchange rate, on the one hand, and between competitiveness and economic freedom, on the other hand. But we consider that a complete equation must take into account these three variables together – competitiveness, economic freedom, real exchange rate – especially for Romania.

The Growth Competitiveness Index

The GCI (Growth Competitiveness Index) brings together a number of complementary concepts aimed at providing a quantified framework for measuring competitiveness. In formulating the range of factors that go into explaining the evolution of growth in country, it identifies “three pillars”: the quality of macroeconomic environment, the state country's public institutions, and the level of technological readiness (Global Competitiveness Report, 2005-2004).

Growth Competitiveness Index (GCI) represents a score that each country obtains; it is influenced by the following factors: macroeconomic performance, governmental efficiency, infrastructure and technology, business efficiency. This index has to be as big as possible (the maximum value is 7).

Against the previous years, since 2006 the Growth Competitiveness Index, albeit simple in structure, provides a holistic overview of factors that are critical to driving productivity and competitiveness, and groups them into nine pillars: **Institutions; Infrastructure; Macroeconomy; Health and primary education; Higher education and training, Market efficiency; Technological readiness; Business sophistication; Innovation.**

The selection of these pillars and the factors underlying them is based on the latest theoretical and empirical research. It is important to note that none of these factors *alone* can ensure competitiveness. The value of increased spending on education will be undermined if rigidities in the labour market and other institutional weaknesses make it difficult for new graduates to gain access to suitable employment opportunities. Attempts to improve the macroeconomic environment - e.g., bringing public finances under control - are more likely to be successful and receive public support in countries where there is reasonable transparency in the management of public resources, as opposed to widespread corruption and abuse.

Innovation or the adoption of new technologies or upgrading management practices will most likely not receive broad-based support in the business community if protection of the domestic market ensures that the returns on rent-seeking are higher than those for new investments.

Therefore, the most competitive economies in the world will typically be those where concerted efforts have been made to frame policies in a comprehensive way, that

is, those which recognize the importance of a broad array of factors, their interconnection, and the need to address the underlying weaknesses they reveal in a proactive way.

Beyond these pillars, which capture a more comprehensive set of growth factors, the GCI has a number of other important distinguishing features. One is the formal incorporation of the notion that countries around the world are functioning at different stages of economic development. The relative importance of particular factors for improving the competitiveness of a country will be a function of the starting conditions, that is, those institutional and structural features which characterize a country in comparison with others in terms of development, as measured by per capita income (Global Competitiveness Report, 2006-2005).

For competitive increasing the countries manage their environments according to what we call the four fundamental forces: these four dimensions shape the country's competitiveness environment. They are often the result of tradition, history or value systems and are so deeply rooted in the 'modus operandi' of a country that, in most cases, they are not clearly stated or defined. However, it is possible to integrate these dimensions into an overall theory, which is systemic, that is, which also describes the relationships among the four axes. This theory does not aim to quantify the competitiveness of a country, but rather to highlight a "competitiveness profile", which characterizes an economy and anticipates how it may behave (Garelli, S., 2004).

In this context, Romania has made all the efforts in order to increase the national competitiveness, generally, and business competitiveness, in particularly.

Global Competitiveness Report placed Romania in 2006 on the **68 rank** from 125 countries, with 1 place more than in 2005 but with a higher score (4.02).

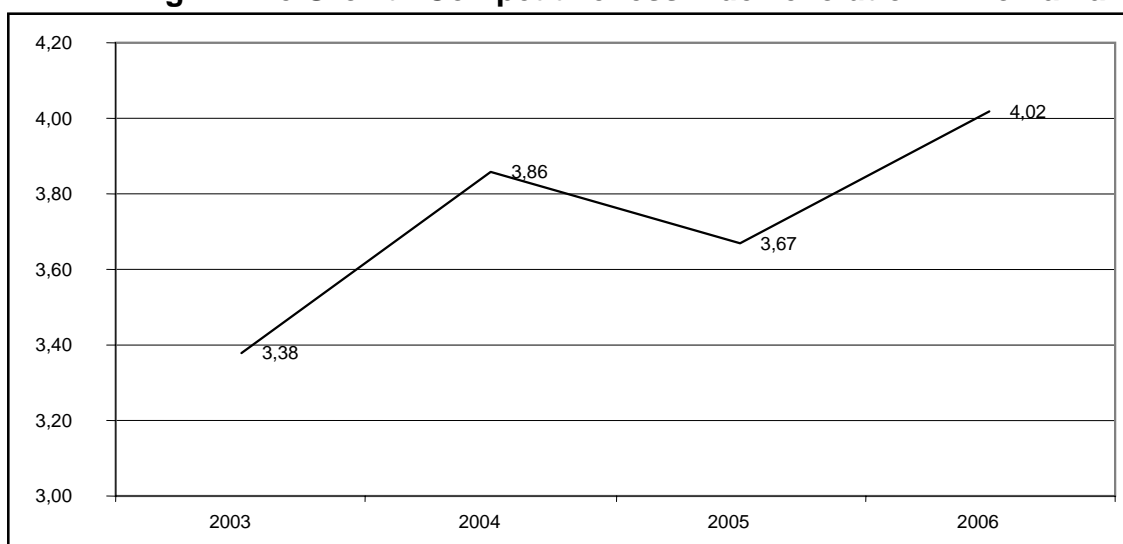
Tab.1. Growth Competitiveness Index, 2006

| | Pillar | Score | Rank |
|---|-------------------------------|--------------|-------------|
| | Basic requirements | 4.19 | 83 |
| 1 | Institutions | 3.40 | 87 |
| 2 | Infrastructure | 3.05 | 77 |
| 3 | Macroeconomy | 3.94 | 97 |
| 4 | Health and primary education | 6.38 | 69 |
| | Efficiency enhancers | 3.99 | 55 |
| 5 | Higher education and training | 4.34 | 50 |
| 6 | Market efficiency | 4.03 | 76 |
| 7 | Technological readiness | 3.59 | 49 |
| | Innovation factors | 3.52 | 73 |
| 8 | Business sophistication | 3.89 | 73 |
| 9 | Innovation | 3.14 | 68 |

Source: Global Competitiveness Report, 2006-2005, World Economic Forum

Even if Romania lost one place in the world top of competitiveness, Growth Competitiveness Index is higher in 2006 with 0,35 point comparing with 2005. By comparison with median, Romania succeeds just in 2 pillars – higher education and training and technological readiness – to take place in first half of the top.

Fig. 1. The Growth Competitiveness Index evolution in Romania



The index of economic freedom

The business environment is the one that is taking over all the impulses which national cultures are bringing forth them. Many times a favourable business environment can diminish the culture differences which exist or can exist. However some questions come up: Are the multinational companies subjecting to the host country culture or are introducing the culture from the origin country to the host country? Are the multinational companies bearing the stamp of their national origins? In fact, can globalization increase the national differences, not eliminating them?

We consider that we can find the answers of these questions in the syntax: "economic freedom". We measure economic freedom with the index of economic freedom calculated by the Heritage Foundation. This index is more than a set of empirical data; it represents a careful analysis of the factors which has the greatest influence on the institutional measures of the economic growth. More than that, it represents an essential factor which influences the business environment in a country.

This index includes 50 variables which are grouped under the following categories: Trade policy; Fiscal burden of government; Government intervention in the economy; Monetary policy; Capital flows and foreign investment; Banking and finance; Wages and prices; Property rights; Regulation; Informal market activity (corruption).

Score 1 represents the highest degree of economic freedom; and 5 represents the lowest degree of economic freedom. The countries which have a score close to 5 are countries deprived of economic freedom.

In fact, the economic freedom represents an institutional and political substantial environment which influences the economic growth through the increase of investments efficiency. The critiques related to the economic freedom refer to the act that a market economy entails the inequality of the earnings, to the environment degradation, to poverty, to precarious conditions to work. The market economy upholders assert that without a measure of economic freedom, the answers to the key questions are evasive, able to create more confusion.

The absence of an economic freedom will entail the spoiling of the business environment, the decline of direct foreign investments, the decrease of the access to resources and technologies, to corruption.

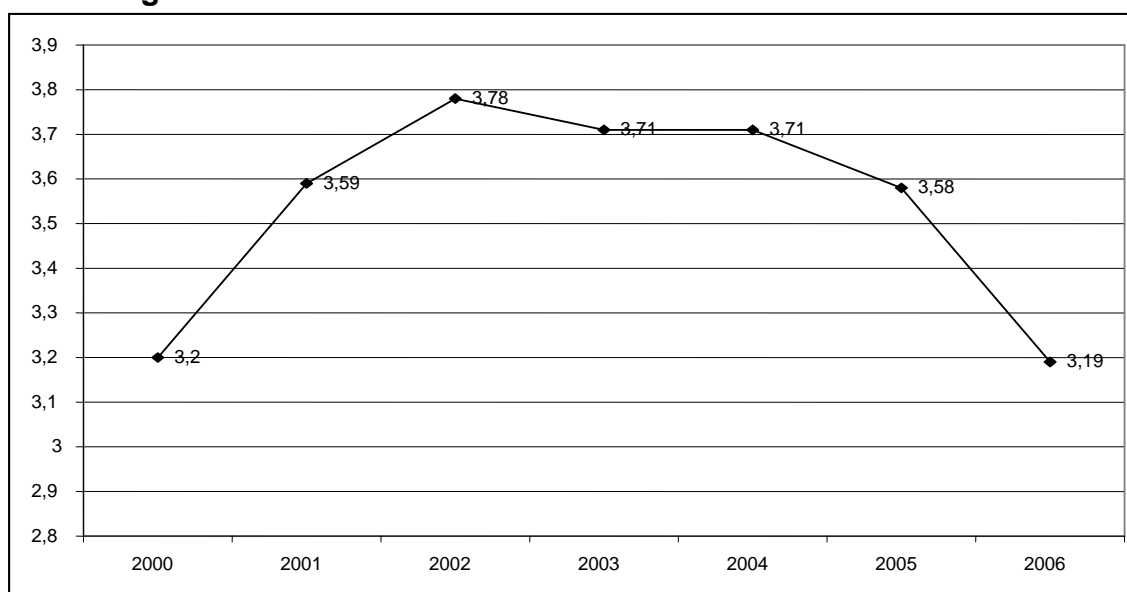
Most of times, the managers are acting taking to account the efficiency principals and there are in a continue searching of competitive advantages.

Business orienting of firms is played taking into account all game rules regardless the culture of the nation and this is why the economic freedom represents the measure imperative of business internationalization.

Manager's act being in titled to extend the business by taking into consideration efficiently and they are looking forward to competitive advantages.

As one might expect capitalist countries highly industrialized with a favourite business environment have a high economic freedom as compared to socialist/communist countries.

Fig. 2. The Index of Economic Freedom evolution in Romania



According to Economic Freedom Report realised by the Heritage Foundation, Romania is a country mostly free with **3,19 points for Index of Economic Freedom** in 2006. This score is an average from following: Trade policy – 3,5; Fiscal burden of government – 1,9; Government intervention in the economy – 1,5; Monetary policy – 4,0 (better with 1 point); Capital flows and foreign investment – 3,0; Banking and finance – 3,0; Wages and prices – 3,0; Property rights – 4,0; Regulation – 4,0; Informal market activity – 4,0.

As it can be observed, Romania has much to do in the domains like monetary policy, property rights, regulation and corruption, to create a business environment that can attract foreign investments.

In 2006, Romania obtained very good results comparing with 2005. These results place Romania on the **92 rank**, that is not an honourably position even if it is on the middle of the top.

The real exchange rate

The real exchange rate is an important economic variable determining country's macroeconomic performance, reflecting the international competitiveness of the domestic economy and having a direct impact on country's export and import development. The equilibrium exchange rate is crucial as it directly influences external competitiveness, especially through export prices. In Romania, the long-run real appreciation of the domestic currency was determined by an improvement in terms of trade and net capital inflows.

The equilibrium real exchange rate is the exchange rate that ensures both domestic and external equilibrium. For transition countries, domestic equilibrium has to be defined in

closed relation with *non-accelerating inflation rate of unemployment (NAIRU)* and external equilibrium has to take into account the balance of payments sustainability (Driver, R., Westaway, P. F., 2001).

Purchasing power parity doctrine claims that the exchange rate is determined by the relative developments of domestic and foreign prices, suggesting that the equilibrium real exchange rate is a constant. Recent studies model the equilibrium exchange rate as a function of real economic fundamentals. The underlying theoretical framework is usually broadly consistent with the tradition of the macroeconomic balance approach. A prominent methodology in this context is the so-called *fundamental equilibrium exchange rate (FEER)* model (Williamson, J., 1994). The FEER is defined as the exchange rate consistent with internal and external balance.

In the economic literature there are used the concepts of *behavioural equilibrium exchange rate (BEER)* and *permanent equilibrium exchange rate (PEER)* (Clark, P. B., MacDonald R., 1999). BEER links the effective exchange rate to a broad set of economic fundamentals (MacDonald, R., 2000). The results suggest that the real long-term interest rate differential, productivity-related variables, fiscal variables and oil prices can be identified as fundamental determinants of the exchange rate.

The equilibrium real exchange rate can be influenced by many factors, such as: **the degree of openness** which reflects the commercial policy of the state and the existing trade barriers. An increase of the openness degree ensures a growth in imports and in the current account deficit. As a consequence, more foreign currency is needed to back up an increase in imports, which will lead to a depreciation of the domestic currency; **the development of the financial system** that is quantify using a number of indicators regarding the development level of the banking system and capital markets; **the intensity of capital flows**. On short term, capital flows generate an appreciation of the equilibrium real exchange rate, inducing excess demand for nontradable goods which will lead to an increase in the prices of this sector. On long term, the effect depends on the way that capital inflows are used. If the capital is used to increase the competitiveness of the national economy, the final effect will be a sustainable appreciation of the real exchange rate. If the capital inflows are used only to trigger an excessive increase in consumption, then the initial appreciation of the real exchange rate will be followed by long run depreciation. Liberalisation of capital flows influences the real exchange rate through reducing of the real interest rate. This reduction fuels consumption, leads to an increase in the non-tradable goods prices and the final effect will be the depreciation of the real exchange rate; **fiscal policy**, through the volume and structure of the government expenditures, the taxes policy and the budget deficit; **trade policy**, through the level and structure of trade tariffs, the policy regarding export subsidies and trade barriers.

One of the most popular measures of the *real exchange rate (RER)* is the **consumer price index (CPI) based RER**. This method is believed to provide a good reflection of the change in the purchasing power of the domestic currency and thus, might be crucial for foreign trade development.

Internal real exchange rates do not play a direct role in the trade performance of the Romania. Foreign trade depends on price competitiveness, measured by the ratio of consumer prices (CPI) between Romania and their partners. The CPI based real effective exchange rate in Romania appreciated during 1999-2005, in line with the general trend in the other transition countries. In broad terms, an appreciation of the real exchange rate, especially at a large pace on short run, means an erosion of competitiveness, as domestic goods and services become more expensive relative to goods and services of partner countries.

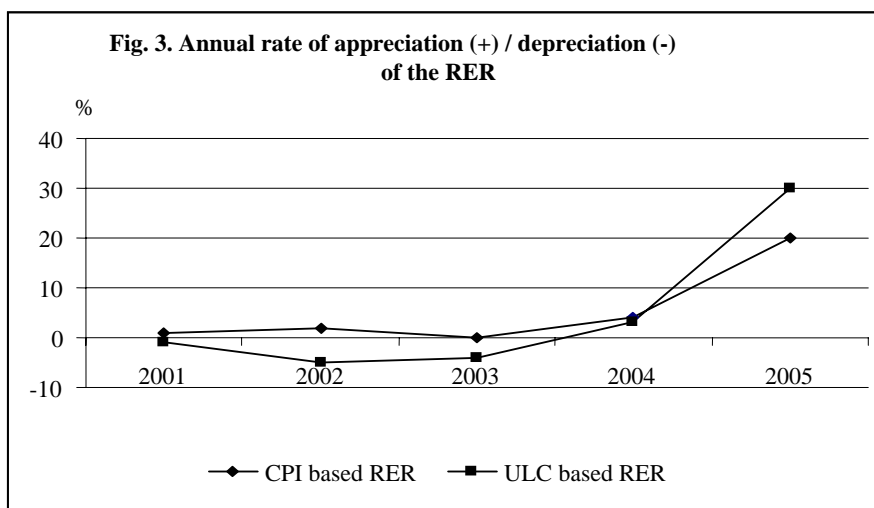
Another measure utilised is the **unit labour cost (ULC) based RER** that is often considered a better indicator of competitiveness than the CPI based RER, given that the labour cost is an important component of production costs. CPI comprises a large range of

non-traded goods and services, and the ULC based indicator is less influenced by the Balassa-Samuelson effect (Checherita, C., 2005).

However, when adjusted for increases in administered prices (which have mainly affected households), the real appreciation rate is much lower, or if ULC is used as a deflator, the real exchange rate may actually depreciate, reflecting lower relative unit labour costs and gains in competitiveness.

In 2005, **real exchange rate** appreciated, affecting external competitiveness. Wages` growth had a major contribution to the ULC based RER. Internal inflation contribution to the real appreciation - if we are referring to the real exchange rate calculated using CPI - decreased and it was based in principally on liberalisation of the administered prices and partially on the international oil price increase while external inflation moderated very little the appreciation.

The evolution of these indicators in Romania is determined by the nominal exchange rate development that in 2005 comparing with 2004 appreciated in nominal terms face to EUR (10,6%) and to USD (10,7%). This fact because of the National Bank of Romania` strategy for intervention on exchange market, that generated a great flexibility of the exchange rate. The fluctuations must be analysed in the context of the capital account liberalisation that generated additional capital inflows contributing at the domestic currency appreciation.



The equilibrium exchange rate is crucial as it directly influences external competitiveness, especially through export prices. The long-run real appreciation of the domestic currency in Romania was determined by an improvement in terms of trade and net capital inflows (IMF, 2004).

The foreign currency structure of the export and import denotes an increase of the commercial exchange weight having EUR as contract currency to USD` detriment. These increasing weights of the euro can be explained by the commercial exchange concentration in the EU countries, especially in the euro zone countries, concentrating the exchange risk in the EUR/RON exchange rate evolution.

Romania's managed float exchange rate regime was geared towards the dual objective of disinflation and preserving external competitiveness. By using inflation targeting strategy since 2005, the National Bank of Romania pays attention to exchange rate developments and external competitiveness to a lesser extent than under the old regime.

Conclusions:

The initial phase of economic transition in Eastern Europe has been accompanied with the introduction of currency convertibility and elimination of many import quotas and

variable tariffs, all of which would eventually allow a country's real exchange rate to begin transmitting more appropriate price signals from the world markets. In this context, Romania has made all the efforts in order to increase the national competitiveness, in general, and business competitiveness, in special.

Global Competitiveness Report placed Romania in 2006 on the 68 rank from 125 countries, with 1 place more than in 2005 but with a higher score (4.02). Romania has much to do in the domains like monetary policy, property rights, regulation and corruption, for a business background that can attract foreign investments.

In 2006, Romania obtained very good results comparing with 2005. These results place the Romania on the 92 rank, that is not an honourably position even if it is on the middle of the top.

For Romania, maintaining external competitiveness is an important problem because imports and exports play an important role in ensuring long-term economic growth. A loss of competitiveness can rapidly be reflected in an increase of the current account deficit. Capital inflows in Romania can determine an appreciation of the real exchange rate but this appreciation must be accompanied by a rise in productivity and in the quality of the products offered on the external markets.

References:

- Checherita, C. 2005. "Cross-country Study on External Competitiveness: Bulgaria, Croatia, Romania", IER Working Paper No. 13, Bucharest, pp. 17
- Chinn, M. 2006. "A Primer an Real Effective Exchange Rates: Determinants, Overvaluation, Trade Flows and Competitive Devaluation", Open Economies Review No. 17, Springer Science
- Clark, P. B., MacDonald R. 1999. "Exchange Rates and Economic Fundamentals: A methodological comparison of BEER and FEER", in MacDonald, R., Stein, J. L. "Equilibrium exchange rates", Kluwer Academic Publisher, UK, pp. 285
- Driver, R., Westaway, P. F. 2001. "Concepts of Equilibrium Exchange Rates", Bank of England
- Garelli, S. 2004. "Competitiveness of Nation: the fundamentals", in World Competitiveness Project IMF "An Assessment of the Real Exchange Rate in Romania", Working Paper No. 37
- Grubaciuc, S. 2002. "Exchange Rate Adjustment in Partially Liberalized Economy", Economics of Planning No. 35
- Knack, S., Azfar, O. 2003. "Trade Intensity, Country Size and Corruption", Economic of Governance Review
- MacDonald, R. 2000. "Concepts to Calculate Equilibrium Exchange Rates: An overview", Economic Research Group of the Deutsche Bundesbank, Discussion Paper No. 3
- Meese, R. A., Rogoff, K. 1983. "Empirical Exchange Rate Models of the Seventies: do they fit out of sample?", Journal of International Economics No. 14
- Williamson, J. 1994. "Estimating Equilibrium Real Exchange Rate", Institute for International Economics, Washington, pp. 177
- *** Annual Competitiveness Report, 2003
- *** Global Competitiveness Report, 2005-2004, World Economic Forum
- *** Global Competitiveness Report, 2006-2005, World Economic Forum
- *** Index of Economic Freedom, Heritage Foundation, Wall Street Journal, 2006
- *** www.weforum.org
- *** www.heritage.org/index