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Patterns of transition

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Two decades of transforming centrally planned into market-based economies have passed but there are still major disagreements about the process. This article offers a fresh approach by focusing on the state as the major agent behind 'transition', whose three pathways are identified as 'gradual', 'radical' and 'chaotic'. The radical model is exemplified by Eastern Europe, the chaotic by Russia while China falls in the gradual category. The radical path has led to the formation of 'imported capitalism', the chaotic to 'industrial feudalism' and the gradual to the 'corporate system'.

Trigger mechanism

The forces that put an end to the state-run ('socialist') system had not come to the forefront instantly. The old system was subject to reforms. In fact, reforms were 'endemic'. The old system did not have to be removed violently. Instead, it found its end when reforms irreversibly fractured it.

Party leaders were open to reforms because according to their Marxist ideology, the state-run socialism can be 'scientifically' engineered – through a sequence of reforms – to increase its overall efficiency above of that of capitalism. In some cases reforms were far-reaching, as in the 1950s the change from physical to financial control of enterprises. This shift opened the door for further changes, particularly in Hungary and Poland, with both beginning major reforms in the late 1960s. After years of dismantling state controls, most economic decisions (including on pricing) were handed

over to state enterprise managers. In the 1970s, the Soviet Union turned to reforms as well.

The departure from the state-run system with bureaucrats deciding for state enterprises coincided with an ideological shift. To function, any system needs legitimacy provided by ideology and its moral content. One would expect the state-run system to be especially dependent on ideological acceptance because of its deliberate effort to put common good ahead of economic self-interest. Initially very powerful, this ideology had eroded in a protracted process that took decades. When the ideology became very weak there was not enough faith in the system to support it. Ideology decayed through self-revaluation and not for external reasons.

The obvious alternative diagnosis is that undeniable economic deficiencies of the system discredited it to the point of its break-down. This stress on economic failings is actually a prevailing view among economists and political scientists. True, in all cases there was a visible fall in the rate of economic growth in the years leading to break-up with the past. But even in the 1980s Eastern Europe and the Soviet Union witnessed an economic growth of 3-4% annually combined with a strong increase in wages. And in China the rates of growth were twice as high.

The slow ideology-caused erosion of support for the system was everywhere driven by the political leadership, not 'the masses'. Specifically, regardless of specific economic conditions, in no case the 'masses' had compelling reasons to challenge the leaders over the economic system – not even in Poland where 'independent trade unions' (allied with the combative and influential Catholic Church) were to appear.

No country in Eastern Europe was in a position to abandon the system independently, and it was clear that only when the Soviet leaders signalled a willingness to take such a step on their own would Eastern Europe follow. This signal came when the Soviet leaders decided to end the 'Cold War' by

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allowing East Germany to be absorbed by West Germany. The Soviet leadership took this step facing only very tiny pockets of domestic dissent better known to western journalists than to locals.

In all cases the party spearheaded the demise of the state-run system in favour of a market-driven one. In Eastern Europe and the Soviet Union the objective appeared to be to secure economic power – not gains – for the members of the class of ‘apparatchiks’ (‘nomenklatura’) – in exchange for giving up the party’s monopoly of political power. In China, however, the concern was to preserve the party monopoly power but change the logic of that power.

State condition

If there was one critical difference among the various countries prior to the demise of the state-run system, it was in the conditions in which their states found themselves. Two patterns had emerged. In Eastern Europe and the Soviet Union the institutional changes in the outgoing state-run system were accompanied by corruption of officials that threw the state into a massive crisis. In China, however, no comparable crisis occurred.

When the ruling parties lost their monopoly in Eastern Europe after 1989 a multiple of parties filled the scene. In most cases, the former ruling parties either quickly disappeared or got reconstituted, dropping their original names and platforms. The offshoots invariably became pale versions of their once mass-scale and disciplined predecessors. Brand-new, more popular parties emerged, but these lacked political or practical experience and had poor understanding of what they should stand for.

Under the great fragmentation of the political scene and inexperience of newcomers, an era of political instability followed. Leaders and rank-and-files of the ephemeral parties felt little loyalty to their own parties. Short-run personal interest, unconstrained by any ideological or moral concerns, gained an upper hand.

With the annihilation of the former single parties the state apparatus had lost much of its control capability exactly at the time when this capability should have been strengthened to fill this power vacuum. But there were also other factors at play, such as the poor understanding of the critical role that states could play in modern societies. This attitude was deeply rooted in the historic tradition of this part of Europe, where nations lacked statehood for centuries. In this atmosphere, loud calls for a minimal state quickly gained great prominence, only adding to the state crisis.

After the collapse of the USSR, in Russia and Ukraine the system’s dismantling went into a near collapse of the state. With the state structures still in place, officials in Eastern Europe were able to use state power to pursue their private interests, but not in Russia since here various attributes of state power were damaged so drastically that such opportunities for state officials were drastically reduced as well. Specifically, in Russia and Ukraine most of the power shifted away from the central state authority to other players. Among them, the most prominent figures to take advantage of this dispersal of authority were provincial governors, but also major city mayors took power in their hands with respective provinces or cities becoming quasi-states. Another group that grabbed state power were the industrial tycoons called ‘oligarchs’ who built their formidable standing on the acquisition of state-owned factories and mines.

What has just recently happened to Russia and Ukraine closely resembles numerous epochs in Russia’s history of political upheavals when the nation slid into years of anarchy, known as ‘smuta’. The more recent case of internal chaos was that after the downfall of the Romanov Dynasty (1917) when the country went through a fury of civil wars.

China was different not only because the state did not slide into crisis but to the contrary, it greatly increased its capability to rule. Why market-oriented reforms would bring about stronger state power rather than a reduced one might be hard to comprehend if one views transition as a substitutive

tion of markets for states. When the state continues to be powerful or increases its strength, it is often claimed that no real reforms of the economic system have taken place. China defies this proposition, suggesting that transition can assume a form where both states and markets expand through reforms. When the state is initially overburdened with multiple tasks, its power may increase by doing less but executing its actions more efficiently. Aware of this, the party-state in China undertook a series of measures aimed at delegating powers to provinces and from provinces to townships. This reform is reflected in e.g. a massive shift of budgetary tax revenues to local levels. The share of the central budget in the national income was cut in half, but the central administration improved its ability to steer the economy with less money.

In China the most far-reaching shift was from strict state-planning to broad-based market reforms as well as systematic relaxation of egalitarian principles while retaining the socialist ideals. Without much visible inter-party struggles, and under remarkable social peace, the shift allowed the state to move its capabilities from ideological tasks to practical issues. This de-politicization of the state machine made it comparable to a 'modern' bureaucracy.

Reform models

When transition started, the differences in the initial conditions showed instantly in the types of reform models adopted. These differences manifested themselves not only in the pace of reforms but also in their mode. To capture these differences of approach, economists typically make a distinction between 'gradual' and 'radical' reform models. In this dichotomy the exclusive focus is on the pace of reforms. This is not helpful when dealing with the three cases of initial state conditions that were identified above.

First, when the typical dichotomy of the gradual vs. the radical model is used, China is always kept out. Poland will be typically identified as a principal case of radical reforms and Russia in turn as a principal

case of the gradual approach. But if included, as it obviously should be, China turns out to be one of the slowest reformers. China started its transition earlier than Eastern Europe and Russia and is still less advanced in it. China's model can be legitimately called 'gradual'.

China's commitment to slow-paced market reforms reflected the idea that enterprises and households must be able to absorb them. The role for the state should be to observe whether the reforms produce overall efficiency gains. When these are found satisfactory, the state initiates no further systemic changes. Conversely, when efficiency improvements are insufficient, the state signals that some restrictions to reforms are eased or lifted (White, 1998).

Second, in terms of the pace of reforms, all cases of transition except China should be regarded 'radical'. However, there is a critical difference between Eastern Europe and Russia in terms of the role of the state in the process of remaking the system. It is helpful to keep the term 'radical' only to denote the reform models adopted in Eastern Europe, where corruption did not make the state unable to set the pace of change.

In terms of reform pace, the extreme case is East Germany, where reforms were instantly undertaken and concluded in less than three years, all in the framework of 'reunification'. The reform pace was driven by state officials seeking gains from absorbing East Germany into West Germany. Elsewhere in the region, it took the fast-paced sequence of governments on average a decade to complete the bulk of the reform tasks, sooner among early reformers (e.g. in Hungary and Poland) and later in countries that allowed some lengthy delays (e.g. in Bulgaria, Romania).

Third, talking about Russia's reforms, it becomes even more obvious how inappropriate it is to characterize its market reforms as 'gradual'. To the contrary, in Russia the economic system changed from state-planning as fast as in East Germany. This does not make Russia to be another East

Germany, since obviously in the latter case the process was under very tight control of the West German state, while Russia entered the change when the state already became largely powerless.

In East Germany, the economic system was immediately suspended and then quickly replaced, but in Russia the economic system immediately disintegrated. Disintegration was fast-paced but this does not make Russia's model radical, since what happened in Russia cannot be called 'reform'. To be called 'reform' it would have to follow a deliberate action of the state, but this is not the case for Russia, where the state just watched the system fall apart. This was a systemic change of course but rather than calling it a 'reform' it is more appropriate to use the word 'chaos', not 'change'.

The Russian 'chaotic' model is not found in the Baltic republics which resemble Eastern Europe. But it is found in Ukraine and Kazakhstan. In other Asian successor states of the Soviet Union there was an eruption of corruption, quickly absorbed into the traditional kinship structures. With this structure at the base, states such as Uzbekistan often acquired enough power to enforce a 'gradual' model that could be related – but by no means equated – with that followed by China.

Economic effects

Economic improvements attributable to market reforms do not show immediately in national statistics. Actually, statistics most often show output declines, even very drastic ones. These are sometimes related by economists studying transition to the inevitable elimination of 'unwanted production' that lacked demand but was supported by pre-reform state subsidies.

The most obvious challenge to the above argument is the case of China, where the economy reported not even a slightest decline in output since the reform took off. Beginning in 1978 in farming and then spreading to other sectors, industry included, China has kept shifting to high rates of economic growth. It might appear that China could have

started its reforms only with miniscule 'unwanted' output to be phased out by the market forces.

But if China really started that way, why would other economies show more of unwanted production to make this theory applicable in their cases? In fact, one would expect China, mismanaged by some unfortunate earlier economic experiments, to suffer from more of unwanted production than Eastern Europe and Soviet Union.

This question cannot be answered with the help of statistical analysis of an extent of the unwanted production because such statistics do not exist. Only some anecdotal evidence is provided by the proponents of the argument that by removing subsidies market reforms caused inevitable output decline. One is thus left to speculate that even if the actual extent of unwanted production in China was significant, and possibly larger than in Eastern Europe and the Soviet Union, this made no difference for China for the very simple reason that only China's leaders adopted a gradual model.

Unlike China's gradual model, the Eastern European 'radical' model threw the region into an immediate recession. Twenty years after the initial massive GDP declines, the region collectively is still close to the pre-1990 national income level. Importantly, the most radical among the radical reformers, were those who registered the worst results. East Germany lost 50% of production in one year and only recently passed the pre-1990 level. Another case is Lithuania which lost 70% of output in the first three years of transition and remains below pre-1990 level.

The losses incurred by Eastern Europe are of such proportions that the term recession is actually inappropriate. More accurate would be to call it a catastrophe. While recessions are cyclical, catastrophes are systemic. In this case, there could be only one systemic factor at stake, a state crisis, manifesting itself in the abdication of the canonical duty of the state to maintain healthy economy. If the states did not abdicate this responsibility, they would not allow a massive liquidity/insolvency crisis to erupt,

with the credit crises as the single most important source of the catastrophe.

The devastating impact of the liquidity/solvency crises can be examined by looking at the farming, where reforms involved a radical reduction of subsidies. Prior to reforms they accounted for 45% of unit costs as in the then European Union but went to as low as 5% in Hungary or 10% in Poland. Combined with the removal of tariffs, this caused a flood of imports that earned huge gains for importers but caused a 30% output decline in output/incomes of farmers. In contrast, in China the gradual model kept imports in check and maintained the subsidies to farming. This policy enriched the farmers – and the domestic food output soared.

Third, the chaotic model followed by Russia and Ukraine had to produce an even worse damage to their economies than in Eastern Europe. In fact, the drop in national income in these two economies was much sharper, with Russia reporting a decline over 50% and with Ukraine witnessing a 60% loss of output. It also took both Russia and Ukraine more time to start a recovery from the initial crisis and only very recently had they crossed the pre-crisis level.

Of the former Soviet republics the least damaged turned out to be the republics that did not allow reforms to get out of control. One is Belarus, where the state responded to the damage from the collapse of the Soviet Union not with market reforms but with a series of policy changes. Growth was quickly resumed to reach rates that exceed those of the fastest Eastern Europeans. Another republic with very rapid growth rates was Uzbekistan, where reforms had been more vigorous than in Belarus but still quite restrained.

What made catastrophes in Russia and Ukraine worst was that here money almost disappeared from the economy forcing agents into barter. The reason behind was that while in the Eastern Europe elites still retained some sense of public duty, in Russia and Ukraine they had no reason to

feel responsible to the public. They did not have to satisfy them as voters, since elections were inconsequential and they did not need to motivate them as producers since they met their private needs for luxury goods and services from imports. They didn't also need them as soldiers to protect their wealth, for they kept 'evacuating' abroad money 'earned' on 'acquisition' of state assets and by rigging minerals' export prices.

Asset disposals

To assess the impacts of the three models of transition one must also look at what sort of the ownership structure replaced the old state-ownership system. This is indispensable, since property rights represent the foundation of any economic system and transition can be basically viewed as an ownership reform. The bottom line is that each model has produced different systems of private ownership.

First, When Eastern Europe turned to reforms a near consensus had emerged that the radical program must include a very rapid transfer of private assets to private uses, with two techniques for disposal available. One was the idea of free-of-charge distribution of state capital among citizens based on the hope that such disposal would resolve the financial barrier of extremely low private financial savings. The alternative option was to sell assets to domestic buyers and accept a slower pace but get a more efficient allocation. Except for Czechoslovakia, all economies primarily adopted the sale technique - open bidding or direct allocation.

In all cases privatization has turned out to be a really fast operation, as compared, for instance, to Great Britain where privatization (started in the 1980s) of just 5% of the nation's total assets took 15 years. In contrast, in East Germany sales of 100% of assets owned by the state took about a year, while in second fastest Czechoslovakia, the free distribution of more than 50% of the capital stock required two years. In other countries this process took 8-10 years, but most of the time, these countries witnessed a 2-3 year wave of dis-

posals that took care of 25% or even 30% of the total state assets available for transfer to private owners.

To proceed this fast with privatization the states had to abandon the original idea of selling public assets only to citizens and allowed foreign investors to participate as well. Rather than appropriate assets by themselves, members of the elite quickly turned to seeking gains from facilitating foreign sales. In East Germany virtually all assets went to West Germans. In Hungary, by 1999, over 80% of banking and nearly 70% of industry assets were in foreign hands, soon Poland approached similar levels in banking and industry, and other reformers gradually replicated the Hungarian pattern, with the notable exception of Slovenia and Serbia (Altmann, 2007).

Second, in Russia privatization started almost immediately with the intention of using the free distribution technique already implemented in Czechoslovakia. But rather than spreading vouchers convertible to shares in all companies among all citizens, insiders – managers and workers – were allowed to acquire the shares themselves. Faced with the hardship of economic catastrophe, losing jobs or being unpaid, workers quickly sold shares at a fraction of their values to managers. The most inventive managers used various financial schemes to grab all shares and establish their complete ownership. The process of snatching state assets proved so effective that a small number of insiders managed to quickly amass fortunes and become ‘oligarchs’. They were later allowed to expand through a scheme designed to transfer a large group of flagship companies that were excluded from the voucher-distribution in exchange for credits lines extended to the state. Eventually these assets ended up in the hands of oligarchs since, shocked by even more devastating budgetary shortfalls, the state proved unable to service its debts.

From the beginning of privatization in Russia, foreigners were trying to gain access to state assets by joining hands with the emerging oligarchs. But

these efforts did not usually succeed since domestic players didn’t want to share their booty. Alternatively, they lured foreigners into ventures to cheat them out of money. More practical for foreigners was to build companies from scratch, with consumer goods proving most attractive. Despite aggressive pursuits foreigners managed to establish only limited ownership presence. Official data indicates that foreign ownership in Russian industry reached estimated below 20% and at about 10% in banking.

Third, China followed another avenue of holding on to her national assets. The idea that it is necessary to dispose state assets to establish private property was dismissed. The view prevailed that to create private property, the state must provide favourable conditions for citizens to establish their own businesses. With its presumed higher efficiency the private sector should be able to outgrow the state-owned sector and eventually reach a dominant – but not necessarily exclusive – position as in any normal market economy.

By early calculations to reach this domination through ‘organic’ expansion of private start-ups, China would need no less than 20-40 years. Chinese state apparently did not mind this long waiting. It started in 1978 with agriculture, where communes were not sold or given free away but rented out to peasants with limited and slowly expanding property rights. When in 1985 reforms spread to industry the state sector was kept under control while private parties were only permitted to set up their own businesses.

Only recently, privatization of state companies was permitted but generally with no intent to relinquish control, at least not in the strategic sectors (e.g. banking). However, state companies have been pushed to change their governance structure by partial securitization. In some cases, foreigners have been brought in as initial investors just for newly-listed flagship companies, mainly to help upgrade their management. It is these restructured state companies that emerged as the core of China’s economy, while foreign – mostly non-

controlling – ownership in industry is well under 10% and 2% in banking.

Asset pricing

Pricing of assets under the alternative privatization programs is important both in terms of selecting optimal ownership and providing revenues for state budgets. Unfortunately, there are no official reports on this issue. Foreign agencies have been very active producing reports (including the works by EBRD, World Bank and IMF) but have written none on the patterns of pricing of the state assets slated for privatization.

The overall perception has been that privatization in Eastern Europe permitted some under-pricing and that this was mainly for reasons of technical complexities. The possible magnitude of such under-pricing has been played down, however, because of the equally wide-spread view that the state companies were not worth much (as producing mainly 'unwanted' goods). However, a simple calculation proves that the value of the stock of state assets must have been enormous.

When sales first started in East Germany in 1989, an official estimate of the value of assets in industry and banking was USD 320 billion (Sinn and Sinn, 1992). Eventually the sales generated huge losses. Using the same methodology, Polish assets in industry and banking in 1996 were found to be worth USD 240 billion (Poznanski, 2001, 2006). By then Poland was back to positive growth and the value of assets kept growing. By 2003, with asset privatization well advanced, the budget received USD 24 billion, implying that huge part of national assets had been sold for a fraction of their actual value.

Individual sales also show sharp discounting, as with the steel mill providing half of Poland's total output. With a production capacity of 4 million tons it was worth about USD 4 billion but was sold for USD 0.4 billion. This was about the value of one of the four coke production units owned by the mill but 'excluded' from the valuation. In Romania the prin-

cipal bank – with half of the market – sold 25% of its stock to EBRD/IFC for USD 0.2 billion for an implied total value of USD 0.8 billion. It was then quickly resold to a foreign bank for USD 5.4 billion, meaning that EBRD/IFC bought stakes for 15% of the real value.

In Russia and Ukraine transfers of assets have also produced almost no revenues for the state but the mechanism was different than in Eastern Europe. The free distribution of vouchers that Russia chose first was obviously not supposed to generate revenue for the state except that a special clause allowed managers and workers to buy for cash remaining shares in their companies. Most managers took this option and paid for the shares with credits coming mainly from quickly established own banks (that were let to collapse shortly). Further, ongoing hyperinflation chewed much of their debt and made voucher payments to the state budget practically worthless.

The other method, namely the credit/equity swaps between the oligarchs and the starving-for-cash state did not produce much revenue either, mainly because the valuations were rigged and prices paid were a fraction of the real value. Most of the assets offered by the state were in the mining sector and the credit was provided mainly by tycoons already operating in this sector. Significantly, the two dominant state banks were excluded from the equity/debt deals and when the drastic devaluation crisis of 1997 hit Russia, these banks emerged stronger than before while scores of private banks went bankrupt.

It is necessary to add that after the two waves of privatization, the Russian state has recuperated some of the losses from the asset transfers. Beginning in 2007, the state has engaged in expanding its shareholding in once-privatized companies and has done so at very favourable valuations of share prices. In some cases, these buy-backs have been conducted while target companies were under investigations for various illegalities (e.g. tax evasion). In other cases the privatized firms facing

financial difficulties accepted state's co-ownership in exchange for liquidity injections.

By postponing the transfer of state assets, China limited potential losses of revenues due to improper pricing. Of course, due to the relaxation of state control over state-owned companies, managers were given more opportunities to divert funds for personal gain. While this was an inevitable consequence of reforming the public sector without allowing full-scale privatization, a countermeasure has been quickly enacted. The state started vigorous policing of managers, instituting draconian punishments for misconduct revealed.

While delaying mass-scale privatization of assets, China has been preparing securitization, initially by only allowing state companies to buy shares from each other. In addition to improving governance structure, this helped to develop the skills needed for trading shares publicly. Eventually, a huge pool of private savings was allowed to enter and the stock market reached a sufficient size for public offerings of major state companies.

The turning point was five years ago when the state started listing some of its major companies. To further minimize under-pricing of privatized assets, the state slates for initial offerings only small packets of shares. Foreign investors have been kept away from the initial sales, except for major-bank offerings that included all five principal banks jointly accounting for over 75% of official credit. But even in the banking sector, the bulk of shares will be sold to domestic investors, almost exclusively recruiting from among state companies (the federal pension fund being the largest beneficiary).

Foreign influence

It may be puzzling why the East European state officials did not use their discretionary power to appropriate most of the assets and instead saw them largely flow to foreigners. By keeping privatized assets for themselves, they could gain more than by seeking bribes from foreigners to assist their acquisitions. But taking over state companies on their own was difficult because ridden by their

own crisis, the local states proved no match for the crisis-free foreign states. To secure assets at the best terms for their investors, foreign states 'bribed' their way to the main levers of power over privatizations.

Most of this control went to the European Union which alluded to the prospective EU membership of Eastern European provided the latter 'opens up'. A key agency to steer the disposal of assets turned out to be EBRD, an inter-state-owned bank, which got involved not only in deciding the speedy timetable for particular sales of state companies and pricing of assets. It also frequently got in purchasing large pools of shares for itself. These asset purchases were offered for resale with final buyers receiving preferential credits from EBRD that almost invariably went to Western European corporations collectively taking nearly 80 percent of foreign sold assets.

In Russia, during the initial years of transition it seemed that the country would leave much of its privatization to foreign players too. While the European Union did not make any offer of early membership to Russia, the same EBRD in tandem with the World Bank and the IMF, moved in but never gained operational access to the sales. Accordingly, the EBRD was unable to acquire any major assets for itself and did not succeed in channelling assets to foreign corporations of its choice. At no point did EBRD have any more luck later on.

One wonders why would the foreign effort to extend its influence over privatization to Russia fail, though Russian state, with its more severe crisis of its own, should have been an easier target. The reason is very simple, if one keeps in mind that the state in Russia near disintegrated. This meant that in Russia, with power shifting to non-state agents, the system of law and order collapsed. EBRD could operate successfully under conditions of state corruption with admittedly imperfect law and order but not in a country operating without law and order.

Foreign states have been more successful in Ukraine, which to Russia's disappointment re-

ceived the European Union offer (however ambiguous) of 'association' combined with the entry of EBRD. But the main foreign acquisitions were made not by the EU companies but by more resourceful and aggressive investors from Russia that operated in the same brutal way as in Russia itself.

In China it was the state's remarkable strength that worked to the same effect of keeping foreign influence at bay. China has shown very little interest in involving any foreign agencies in the formulation of reforms. The lure of WTO membership was not enough for the Chinese state to bend to the foreign pressures. To join WTO China committed itself to trade liberalization that still kept out many sectors not competitive enough to withstand competition. Importantly, once China joined, it began to join forces with other emerging economies (Brazil and India) to turn the table on the WTO. It largely succeeded in tempering the aggressive WTO policy of demanding reforms that might be damaging to countries like China.

At the root of the reluctance by China to allow foreign players to influence its privatization is its experience with the forced opening of its economy by 'foreign powers'. Through two wars China had to open its economy to opium imports that almost destroyed its social fabric and then made the country a semi-colony of others. It is telling that with a longer history of foreign threats to sovereignty, mainly from Western Europe, Eastern Europe did not show similar caution in getting the Western Europe involved.

Varied systems

Whether market reforms have been affected by foreign players or driven domestically, an examination of the respective systemic outcomes in the tree groups of countries reveals that none has actually moved to systems prevailing in highly developed countries. This contradicted the wide-spread early expectation that state-run economies would converge with Western advanced economies. That such a convergence did not happen in Eastern

Europe is especially surprising, since its reforms were meant to imitate European Union to the letter. Free of foreign influence Russia and China could follow the Western system but both went their own ways.

With 75% of banking and 65% of industry on average held by foreign investors, Eastern Europe indeed created a system that is different from that of Western Europe. This pattern cannot be found even in the anomalous Ireland, where 45% of banking and 55% of industry is foreign-owned, with averages for Western Europe at 25% for banking (and as low as 6% for Germany) and 20% for industry (and only 6% in Germany) (Altmann, 2007).

By adopting the system relying heavily on foreign ownership, Eastern Europe has created a market economy based on private property, but has not created a solid base of market agents and private owners of its own. It actually imported them into its economies and for this reason the system that emerged from the transition could be called 'imported capitalism' as opposed to the Western Europe's 'domestic capitalism'. In economic terms Eastern Europe moved away from the state-run system that eliminated domestic private owners of capital to a system, where for different reasons such ownership is still basically missing.

There is an analogy between the post-1989 Eastern Europe and the Eastern Europe in the century prior to the 1945 introduction of state-run economy. Some historians of the region argue that one principal characteristic of the region's pre-1945 era and the main reason for its pervasive economic backwardness was the phenomenon of the so-called 'missing class': the lack of a robust domestic social class capable of leading a rapid industrialization. That class was poorly substituted by members of various minorities - but not foreigners and not on the today's huge scale.

Russia managed another resurrection in her turbulent modern history after burying its previous party-state run system. For this resurrection to happen the state had to amass enough power to effectively

coerce non-state players – mainly ‘oligarchs’ into a power-sharing scheme establishing a balance between the state and a few non-state players that jointly monopolize most of the power over the economy.

The economic system built on this compromise is a peculiar mixture of modern and traditional elements. The term that best captures the nature of this mixed system is ‘industrial feudalism’. Largely based on private property and markets both of which are shallowly rooted in formal rules, the system is partially capitalist. But it is also feudal, since the discretion of the state and of the small number of non-state ‘barons’ is pervasive and their interests systematically – even capriciously - interfere with the working of markets.

The achieved political compromise is not stable. It is a fluid arrangement where the fortunes of the state and those of the non-state players periodically change. A power struggle between the state and the non-state actors continuously faces the risk of a major disruption of the whole system. This instability is fuelled by interventions into the working of markets that produce vast opportunities for rent-seeking. High tensions that arise in a struggle for rents are further exacerbated by the fact that the system lacks finesse (e.g. effective channels for peaceful arbitration).

China is yet another case, with an economic system that does not resemble any of the Western systems that could be called ‘liberal capitalism’. With the slow-pace of reforms, the verdict is still out on the exact system China will settle on. There are strong indications that it will be a system peculiar to China, sharing more features with systems operated by economies of Japan, South Korea and Taiwan than with ‘liberal capitalism’ found in Western Europe or the United States.

The former three East Asian economies are often called ‘state capitalist’, but the term ‘capitalist’ does not fit China well. For the term ‘capitalist’ to apply, state in China plays too powerful role in the economy, including as the owner of assets. In today’s

China, there is a system in place where public and private properties are ‘mixed’ in many fluid variations. This description fits the semi-private ‘township companies’ that initially lifted China’s economy as well as the semi-public ‘strategic’ companies that subsequently have become the main engine behind rapid growth.

The hybrid nature of the ownership structure reflects the fact that different interests groups are allowed to bargain with each other in a ritualized way. For this arrangement, scholars use the term ‘corporatist system’ and this term applies pretty well to China and the other three East Asian economies. Still, when one examines all four countries one discovers the limitations of this term. The four East Asian economies share the same over two-thousand- year long tradition of the China-born Confucian concept of the state. If one wants to call China’s system ‘corporatist’ one must then add that it features Chinese, or even better Confucian characteristics.

Conclusions

It is a pity that during the two decades of reforms, the former state-run economies have rarely been brought together under a comparative examination. This neglect is surprising, since all of them began market reforms from the same, Soviet-designed economic system. By integrating the individual country cases into a single sample, many new lessons can be drawn.

First, contrary to the globalization claims about the direction of capital flows to be expected under external liberalization, capital did not flow very abundantly to the capital-scarce Eastern Europe. Rather, through privatization favouring foreign investors, one observed a massive ‘stripping’ of assets in Eastern Europe, with ownership and capital gains passing to agents in the capital-rich economies. This is to some extent also the case of Russia but mainly due to ‘capital flight’ (massive especially in the early years of transition).

It is said the same forces that purport to make capital move from capital-rich to capital-scarce econo-

mies also should make technology flow in the same direction. In China, huge amounts of technology have been injected by capital-rich economies and largely due to this injection, China has improved its domestic technology sector. However, it is also true that during its transition Eastern Europe has seen its technological potential dwindle with its once well-financed higher education suffering steady shortfalls and much of its research sector discontinued or converted into support units.

Expected to benefit from the inflow of capital and technology, the former state-run economies should have shown more robust growth than before the reforms. Again, this globalization claim holds for China which enjoyed two decades of unprecedented growth, but not for Eastern Europe or for Russia that taken as a group have not recovered from the initial 1989/1990 recession and thus experienced two decades of 'lost growth'.

Second, if globalization produces clear winners like China and less clear winners like in Eastern Europe, which factors determine the outcomes? The answer seems to be that the driving factor is the condition of the state. Globalization turns out to be less a 'market affair' and more of a 'state affair'. It is justified to view globalization as a process that fosters competition among nation states where better-run states can take resources and/or markets away from the worse-run states.

It is fallacious to claim that globalization makes states to vanish to make room for markets. Such an institutional substitution certainly did not occur in China where the state has never retrenched but instead raised its efficiency. However, Eastern Europe and especially Russia saw their states greatly limited through systemic changes. By reducing state capacities, intentionally or accidentally, the economies of Eastern Europe and Russia suffered clear losses.

Rather than promoting competition, globalization enhances opportunities for monopolization. In China, it is the 'strategic corporations' that have emerged from the reforms as major winners, in

Russia it is 'oligarch conglomerates' and in Eastern Europe it is the 'foreign multinationals'. The increased risk of rent-seeking that follows is to be countered by the states. Globalization needs states to become stronger to succeed. The Chinese state has strengthened and its globalization succeeded. Where the states did not strengthen (or failed), the effects of globalization are more problematic, to say the least.

Third, the idea behind the globalization concept is not really confirmed – that there is such a thing as the best-practice system and that market-oriented reforms allow for this kind of system to be identified. The Anglo-Saxon model of 'liberal capitalism' has often been claimed to provide such a desired prototype for the rest of the world, continental Western Europe included. Within this vision the Anglo-Saxon model would not only be uniformly best for all nations but also for all posterity, marking an 'end of history'.

No such end is coming. Instead, each transition economy has built something of its own, each time largely in line with its own historic tradition. The state tradition seemingly has been of greatest consequence, with China building on its ancient concept of Confucian state. Eastern Europe has been haunted by its statelessness in most of its modern time and in Russia the key was the imprint of its absolutist (sometimes enlightened) state past.

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Recent trends in the quality of traded goods: NMS are closing the gaps

BY NEIL FOSTER, JOHANNES PÖSCHL
AND ROBERT STEHRER¹

In this article we identify the reasons behind the geographical shifts of sourcing patterns and destination of exports of EU-27 countries and relate these shifts to changes in import (export) prices which may reflect changes in product quality. We do so first by relating changes in the market shares of the imports of the six country groups under consideration – EU-15, NMS-12, Advanced OECD (AOECD), Asia, BRIC, Rest of the World (RoW)² – in total EU-27 imports to changes in the relative price (the so-called unit value ratios) of the products. On the export side we similarly calculate the unit value ratios and market shares: in this case, however, we are only able to relate shares of exports of the EU-27 countries in EU-27 total exports to the six country groups as the COMEXT dataset does not provide information on total world exports to these groups. The respective export prices are set in relation to the EU-27 exports prices to the particular country groups. We do these exercises by differentiating between end-use categories and broad industry aggregates. First we shortly summarize the method applied.

¹ This article is a short version of a chapter from the study carried out within the Framework Service Contract B2/ENTR/05/091 – FC by the European Commission.

² Thus we consider six different country groups: EU-15 includes all countries being members of the EU since 1995, EU-12 includes all countries having joined the EU in 2004 or later (thus this group includes all Central and Eastern European countries together with Cyprus and Malta). EU-15 and NMS-12 together are denoted as EU-27. Further we consider a set of advanced OECD countries not included in EU-15 or EU-12 (Australia, Canada, Switzerland, Iceland, Japan, Norway, New Zealand), a group of Asian countries including Hong King, Indonesia, South Korea, Macau, Malaysia, Philippines, Singapore, Thailand, Taiwan and Vietnam, the BRIC countries (Brazil, Russia, India and China) and finally a rest of the world category (RoW). One should note, however, that we provide detailed information for each of the EU-27 countries as reporter countries and only aggregated the partner countries accordingly.

Box: Calculations of unit value ratios

For this purpose let us denote the value of exports to the EU-27 of commodity i by country c in year t by v_{it}^c and the quantity (measured in tons) by q_{it}^c , the export unit value is defined as

$$u_{it}^c = \frac{v_{it}^c}{q_{it}^c}$$

The unit values of country c 's exports to the EU are then compared to the unit values of total EU imports (from the world, including intra-EU trade) by calculating the logs of the unit value ratios

$$r_{it}^c = \ln \frac{u_{it}^c}{u_{it}^{EU-27}}$$

Here, $u_{it}^{EU-27} = \sum_c v_{it}^c / \sum_c q_{it}^c$

denotes the unit value of total EU imports for a particular commodity i in year t . In logs, the ratio is thus larger than zero if the export unit value of country c is larger than the unit value of total EU imports. We shall not present information at the very detailed (8-digit) product level but aggregate the unit value ratios to the level of product categories and industry groups. This is done by constructing a weighted sum of the unit value ratios r_{it}^c across the products belonging to a particular industry group j and product group k . The weight used for a particular commodity i in such an aggregation is the share of its export value in the industry's or product group's exports of country

For exports of the EU-27 we perform a similar exercise. However, one has to keep in mind that using the EU COMEXT database does not allow to use total exports to the world (from all countries) as a unit for comparison as this dataset provides information on exports and imports of EU-27 countries only, thus excluding trade flows between non-EU members. Consequently, we have to define the unit value ratios for exports as

$$r_{it}^c = \ln \frac{u_{it}^c}{u_{it}^{EU-27}}$$

where u_{it}^c denotes the unit value of exports for country c being a member of the EU-27 and u_{it}^{EU-27} denotes the unit value of total EU-27 exports to the world. Export shares are defined as the share of country c 's exports to the world in total EU-27 exports in the respective product and industry categories.

Below we summarize the findings in graphical form using the following scheme. If both market shares of a particular country group and the unit value ratios are changing positively, we speak of a ‘successful quality competition’ (quadrant I). In case that market shares are increasing, but unit values are falling, we speak of ‘successful price competition’ (quadrant II). If both market shares and unit value ratios are declining, we define it as ‘unsuccessful price competition’ (quadrant III). Finally, the situation of increasing unit value ratios but decreasing market shares is described by ‘pricing oneself out of the market’ (quadrant IV).

Figure 1

Schematic presentation of changes in market shares and relative prices



EU-27 imports by product categories

Let us first consider the import side. Table 1 reports the unit value ratios and market shares in 1999 and 2008 and the respective changes.

Considering first the unit value ratios in 1999, the striking fact is that these are negative for the NMS-12 and BRIC countries for all product categories (their exports are cheaper than average). For Asian countries these are negative for consumer goods and those products not classified. For the NMS-12 the unit value ratios are relatively smaller for intermediate products and capital goods; for the Asian countries the unit value ratio is particularly low for those products not classified but positive for intermediates and capital goods. For the BRIC countries the unit value ratio is highest for the in-

termediates, but much lower for consumer goods and capital goods in particular. The advanced OECD countries show particularly high unit value ratios in all product categories with the exception of the products not classified.

Interpreting these differentials one might argue that the NMS-12 started off in 1999 with a comparatively low quality of products whereas Asian countries managed to sell (intermediates) at quality levels even above EU-15. But this has changed quite a bit over time as can be seen from Figure 2, showing the unit value ratios in 1999 and 2008.

The NMS-12 countries managed to close the gap in unit value ratios for all products. Comparing across product categories this was particularly the case for consumer goods and capital goods but less so for intermediate products. This is in stark contrast to the developments regarding the BRIC countries where the unit value ratios tended to remain more or less constant (only slightly increasing for capital goods), with strong declines found for products not classified. The Asian countries experienced strong increases in unit value ratios for intermediates and capital goods; the advanced OECD countries did so for all product categories with the exception of those not classified. Finally, for the EU-15 countries one also observes an increase in all categories, being largest for capital goods and those products not classified.

One has to bear in mind, however, that these changes in unit value ratios might reflect not only quality differentiation but also cost movements, the two of which are hard to disentangle. To investigate this in more detail we consider the scheme as indicated in Figure 1, which requires us to take account of changes in market shares as well. From Table 1 one can see that market shares declined for the EU-15 countries, the Asian and advanced OECD countries, and increased for the NMS-12 and the BRIC group. Yet there is some differentiation across product categories: Whereas the advanced OECD countries lost market shares mostly in capital goods (-9.5 percentage points) and intermediates (-5.3 percentage points) the BRIC

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countries gained market shares in capital goods (9.6 percentage points) and also – but to a lesser extent – in intermediates (4.9 percentage points)

and consumer goods (5.2 percentage points). For the EU-15 and NMS-12 these changes are less differentiated across product categories.

Table 1

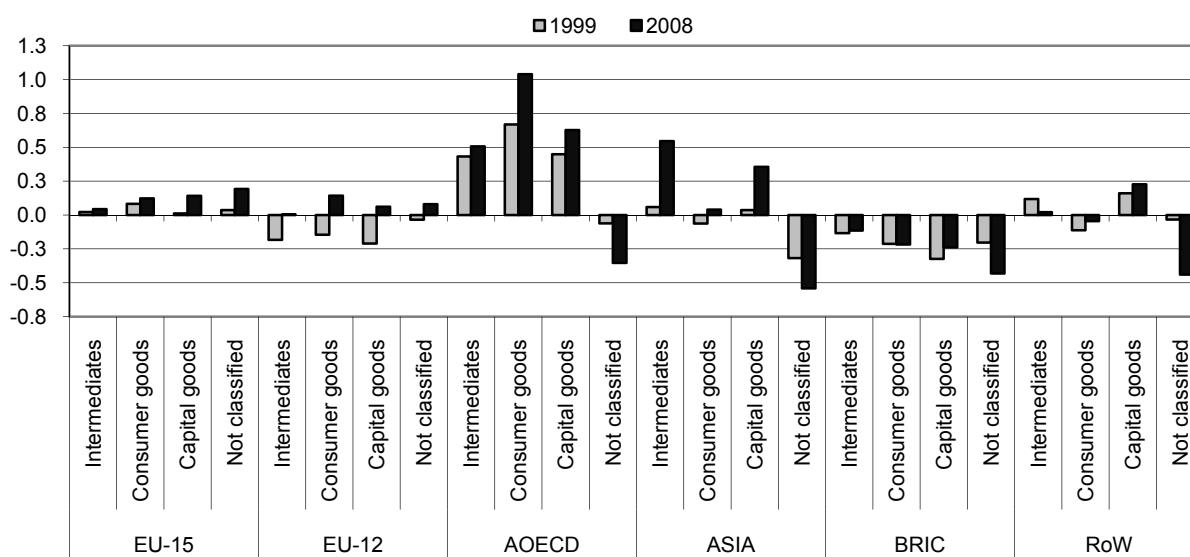
Unit value ratios and market shares in the E'U-27, 1999 and 2008

Partner	Product category	1999		2008		Change in	
		unit value ratio	market share	unit value ratio	market share	unit value ratio	market share
EU-15	Intermediates	0.022	65.5	0.043	60.9	0.021	-4.6
	Consumer goods	0.082	62.0	0.122	59.0	0.040	-3.1
	Capital goods	0.011	60.4	0.141	55.1	0.130	-5.3
	Not classified	0.036	79.8	0.192	73.9	0.156	-5.9
NMS-12	Intermediates	-0.183	4.9	0.005	8.7	0.188	3.9
	Consumer goods	-0.145	5.6	0.143	8.8	0.288	3.2
	Capital goods	-0.211	2.6	0.061	6.8	0.272	4.2
	Not classified	-0.035	4.8	0.080	10.7	0.115	6.0
AOECD	Intermediates	0.432	16.4	0.507	11.1	0.075	-5.3
	Consumer goods	0.668	9.7	1.039	7.8	0.370	-1.9
	Capital goods	0.449	23.2	0.627	13.7	0.178	-9.5
	Not classified	-0.062	11.0	-0.354	8.8	-0.292	-2.2
ASIA	Intermediates	0.059	4.6	0.546	3.8	0.488	-0.8
	Consumer goods	-0.063	6.2	0.040	3.7	0.104	-2.5
	Capital goods	0.036	7.9	0.355	7.7	0.319	-0.2
	Not classified	-0.318	2.6	-0.541	2.2	-0.223	-0.5
BRICS	Intermediates	-0.134	3.7	-0.115	8.7	0.020	4.9
	Consumer goods	-0.213	8.3	-0.218	13.5	-0.005	5.2
	Capital goods	-0.324	3.3	-0.239	13.0	0.086	9.6
	Not classified	-0.204	0.4	-0.431	1.1	-0.226	0.7
RoW	Intermediates	0.118	4.9	0.021	6.7	-0.097	1.9
	Consumer goods	-0.112	8.2	-0.045	7.3	0.068	-0.9
	Capital goods	0.160	2.5	0.227	3.7	0.067	1.2
	Not classified	-0.033	1.5	-0.440	3.3	-0.406	1.8

Source: EU COMEXT; wiiw calculations.

Figure 2

Unit value ratios of imports to the EU-27 by product categories, 1999 and 2008



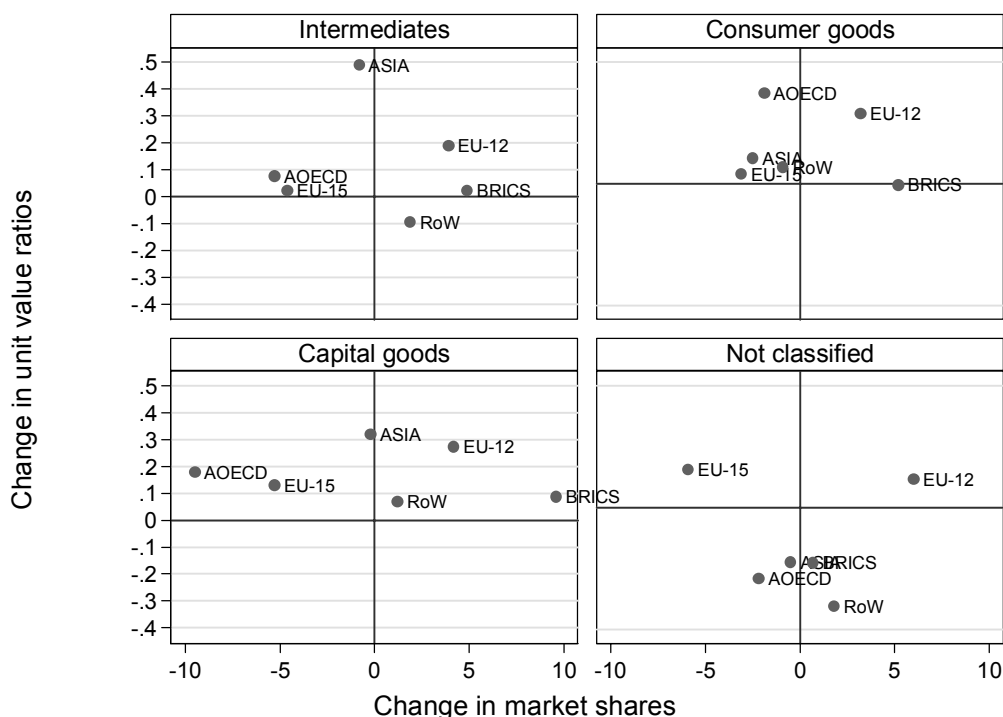
Source: EU COMEXT; wiiw calculations.

Figure 3 presents the relationship between changes in market shares and changes in unit value ratios which can be interpreted according to the scheme in Figure 1. It reveals different movements by country groups and product categories. Starting with intermediates, the Asian countries have been successful in selling at higher unit value ratios with very little losses in terms of market shares. The advanced OECD and EU-15 countries lost market shares with only small observed changes in unit value ratios (though slightly increasing), whereas the BRIC countries managed to gain market shares without significant changes in unit value ratios. This would indicate that there was a substitution process going on with intermediates from advanced economies being replaced by those from the BRIC countries. One should note in this respect that unit value ratio differences for intermediates are relatively low (compared to other product categories). Only the NMS-12 countries developed accordingly to what was named 'successful quality competition', i.e. rising unit value ratios and gaining market shares simultaneously. For consumer goods the situation is somewhat similar though a

little less pronounced. In particular, in this case the advanced OECD countries show relatively large increases in unit value ratios with relatively minor losses in market shares, while Asian countries lost market shares and showed only small increases in unit value ratios. Again, the BRIC countries and the NMS-12 managed to increase their market shares, the former group at constant unit value ratios and the latter group at higher unit value ratios. The largest changes in market shares occurred with respect to capital goods. The advanced OECD and EU-15 countries lost to the BRIC and NMS-12 countries. The Asian countries managed to keep their market shares at higher unit value ratios. For those products not classified (including important categories such as motor cars) the most important changes in market shares can be observed between the EU-15 and NMS-12 countries, with the first group losing market shares (-6 percentage points) at higher unit value ratios and the second group gaining market shares (6 percentage points) at higher unit value ratios. The other country groups show fewer significant changes in market shares but at lower unit value ratios, indicating that

Figure 3

Change in market shares and unit value ratios in the EU-27, 1999-2008



Source: EU COMEXT; wiiw calculations.

the BRIC countries have been successful in competing in price levels whereas the advanced OECD and Asian countries have been unsuccessful in this respect.

EU-27 imports by product categories and industry groups

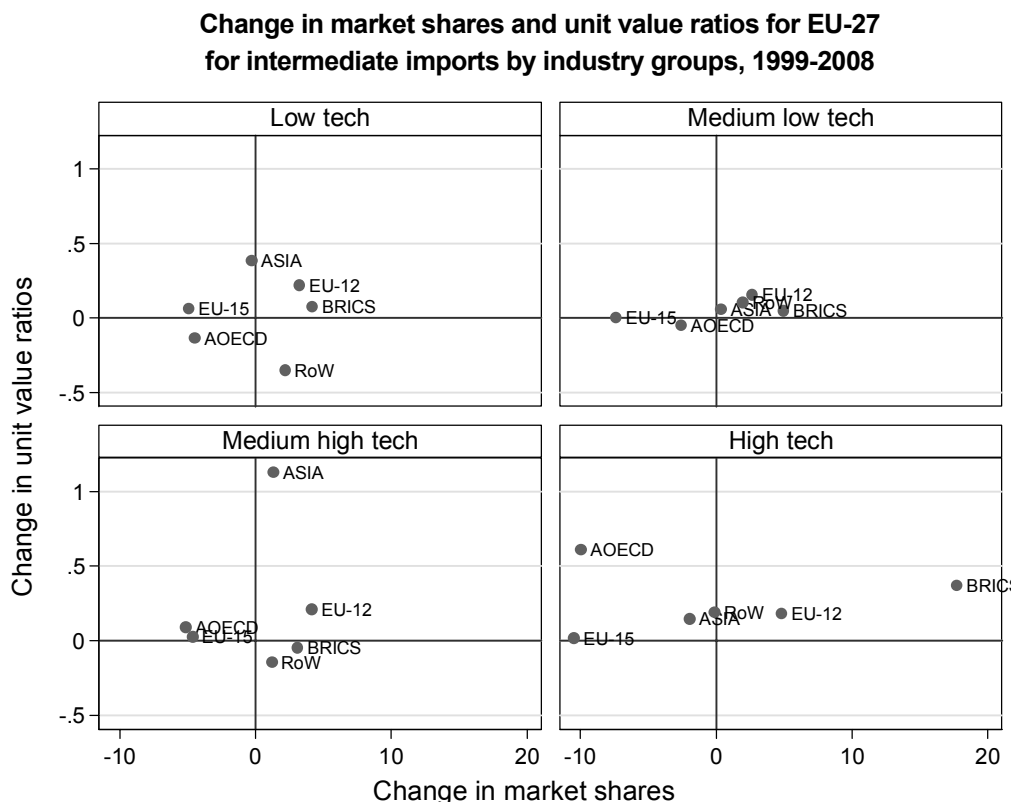
A similar exercise can be undertaken when considering trade in product categories for four different industry groups (low tech, medium-low tech, medium-high tech, and high tech). This may yield additional insights with respect to differences across industry and country groups. We start by considering changes in unit value ratios and market shares of intermediate products in the four industry groups. These are presented in Figure 4.

The EU-15 countries lost market shares at almost unchanged unit value ratios in all industry groups, with losses being largest in medium-low and high tech industries. The NMS-12 countries gained market shares at higher unit value ratios in all industry groups, without much differentiation across industry

groups. The BRIC countries also show increases in all industry groups with only minor changes in unit value ratios. The exception, however, is the high tech industry group where the BRIC countries gained almost 20 percentage points in market shares at – compared to changes of unit value ratios in other industry groups – higher prices. The advanced OECD countries lost market shares in all industry groups but particularly so in the high tech industries where also unit value ratios increased relatively strongly for this country group. Finally, the Asian countries more or less defended their market shares in all product categories. A striking aspect is the large increase in unit value ratios in medium-high tech industries pointing towards higher quality.

It is interesting to compare these changes with those for consumer goods, which are presented in Figure 5. The most interesting aspect is that the NMS-12 countries strongly gained in market shares in the high tech industries at moderately higher unit value ratios while for the BRIC countries no change in market shares can be observed. The

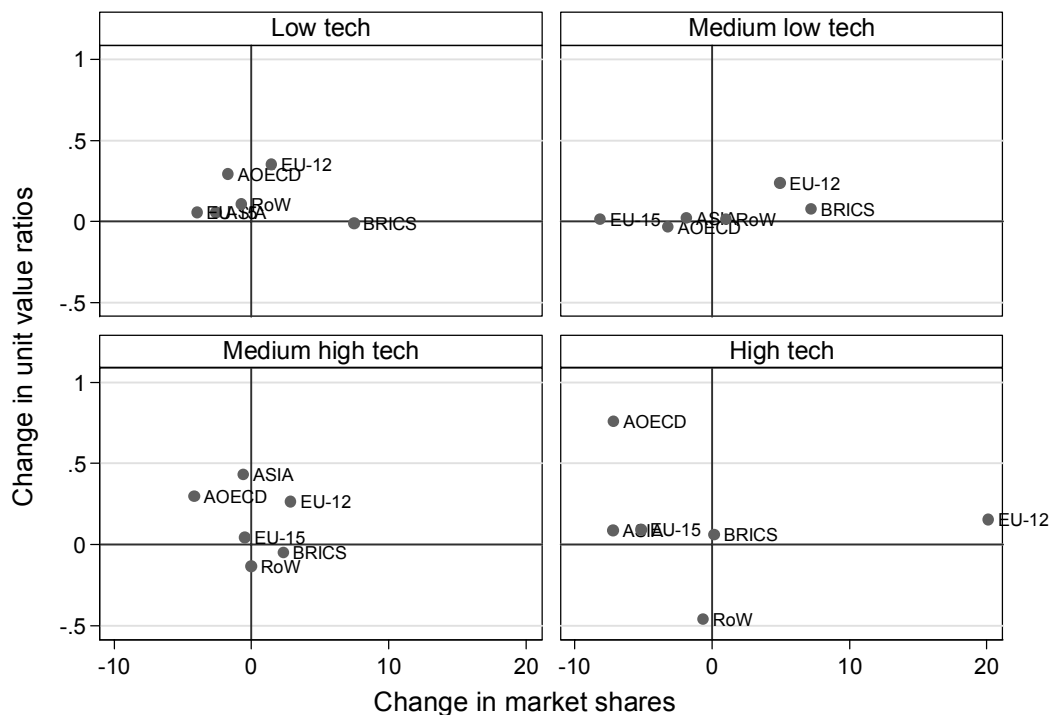
Figure 4



Source: EU COMEXT; wiiw calculations.

Figure 5

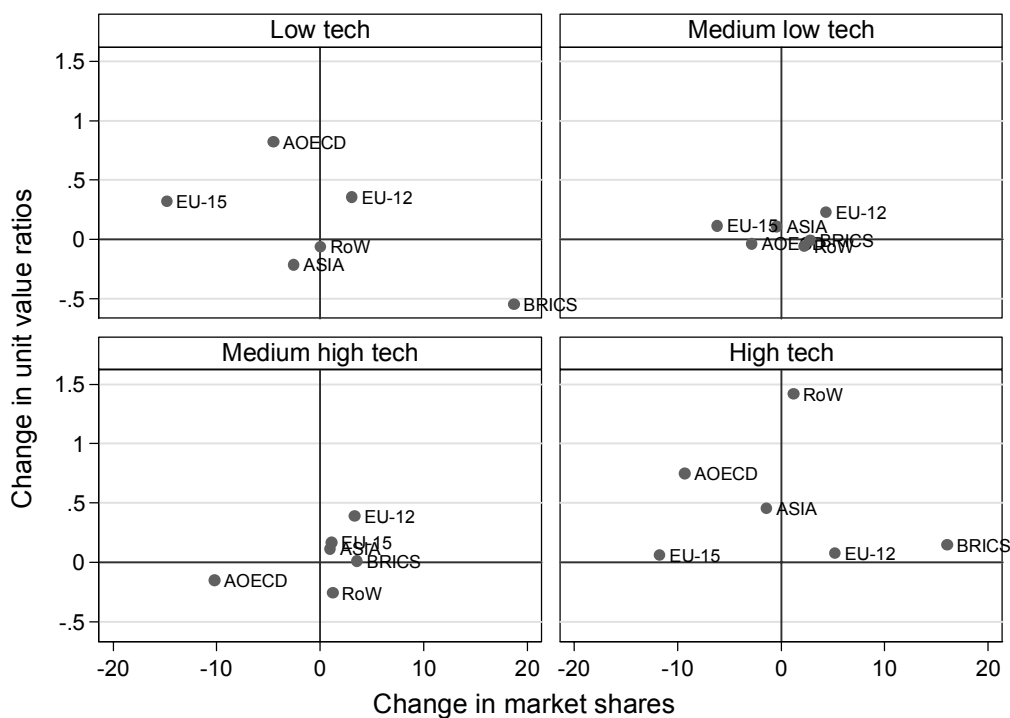
Change in market shares and unit value ratios for consumer goods by industry groups, 1999-2008



Source: EU COMEXT; wiiw calculations.

Figure 6

Change in market shares and unit value ratios for capital goods by industry groups, 1999-2008



Source: EU COMEXT; wiiw calculations.

other patterns are comparable to those found for intermediate products though changes in unit value ratios seems to be less pronounced (e.g. for Asian countries in medium-high tech industries).

Figure 6 presents these changes for capital goods.

Without going into detail, the most striking aspects are that for capital goods the BRIC countries gained mostly in low and high tech industries where losses for EU-15 countries were relatively high. It is also interesting to note that BRIC countries show a decrease in unit value ratios in low tech but an increase in unit value ratios in high tech industries, pointing towards successful price competition in the low tech industries, but successful quality competition in the high tech sectors. For the remaining product categories the situation is somewhat different, as NMS-12 countries gained most in market shares, in particular in medium-low and medium-high tech industries. Again, the EU-15 countries are the most important losers in terms of market shares in these two industry groups, though they gained a little in low tech industries with falling unit value ratios however.

Exports from EU-27

Trade in intermediates does not only imply importing intermediate products for use in the domestic production process but also exporting intermediates, which for some countries makes up an important part of trade. Countries are not only users but also producers of intermediates.

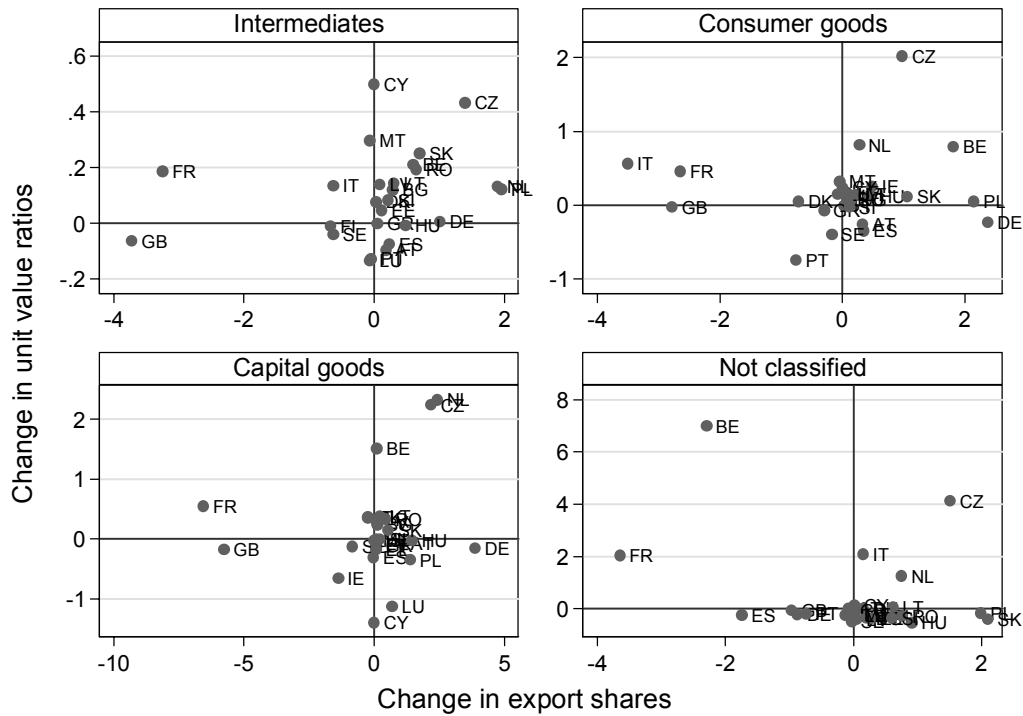
Figure 7 presents the results following the method outlined above for EU-27 exports. We immediately split the products into the end-use categories considered. From this figure it is apparent that France and Great Britain faced a loss in export shares in almost all product categories, Italy in consumer goods and Belgium in products not classified. One should notice that the change in market shares for these countries can be rather large in particular groups (4 to 5 percentage points) whereas the gains in market shares for the other countries are lower and more spread across countries (the excep-

tion being Germany for capital goods). The loss in market shares in France, Italy and Belgium occurred alongside higher prices. Second, there are a number of countries gaining export shares at higher prices (thus performing a successful quality upgrading). In particular, a number of NMS-12 countries gained shares at higher unit value ratios in intermediates, suggesting that these countries successfully upgraded their exports for intermediate products. This is less the case for consumer goods (with the exception of the Czech Republic) and capital goods. An analogous exercise can now be performed at the level of industry or industry groups. In Figure 8 we show this for trade in intermediate products.

The most striking feature in this graph is that most dynamics in terms of market shares are observed in the medium-high and high tech industries. In particular, Great Britain and France are losing export shares in these two industry groups whereas Germany is gaining in the high tech group. Some Eastern European countries (Slovak Republic, Czech Republic, Poland) experience both increases in unit value ratios and market shares. In fact in these two groups most countries are gaining at the expense of France and Great Britain.

Figure 7

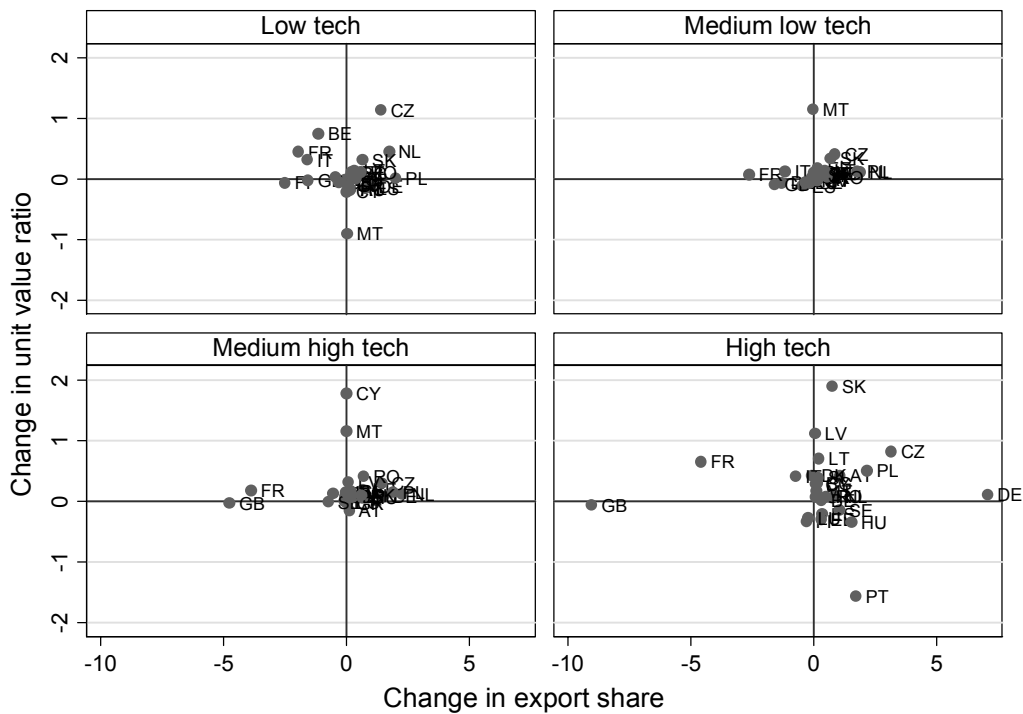
Change in export shares and unit value ratios by product category, 1999-2008



Source: EU COMEXT; wiiw calculations.

Figure 8

Change in export shares and unit value ratios for intermediates by industry groups, 1999-2008



Source: EU COMEXT; wiiw calculations.

Animal spirits

BY VLADIMIR GLIGOROV

Two recent books put Keynes' reference to animal spirits, as a motivational factor for uncertain long-term investments, at the centre of the understanding and explanation of how the capitalist economy works and does not work.¹ The book by Akerlof and Shiller discusses five types of animal spirits as psychological traits. Their aim is to describe the animal spirits and the way that they influence behaviour. Farmer develops further his work on self-fulfilling prophecies where animal spirits are random shocks of changing beliefs on investment decisions, which get validated through the consequences they produce.

How are the notions of animal spirits used in these two books related to Keynes' idea of animal spirits in *The General Theory of Employment, Interest and Money*? Animal spirits appear in the 7th section of the 12th chapter and not in any other chapter or in any other of Keynes' writings as far as I am aware. The treatment of animal spirits is short and can be extensively cited:

'Even apart from the instability due to speculation, there is the instability due to the characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than on a mathematical expectation... Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of animal spirits – of a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities. Enterprise only pretends to itself to be mainly actuated by the statements in its own prospectus, however candid and sincere. Only a little more than an expedition to

the South Pole, is it based on an exact calculation of benefits to come. Thus if the animal spirits are dimmed and the spontaneous optimism falters, leaving us to depend on nothing but a mathematical expectation, enterprise will fade and die – though fears of loss may have a basis no more reasonable than hopes of profit had before.

It is safe to say that enterprise which depends on hopes stretching into the future benefits the community as a whole. But individual initiative will only be adequate when reasonable calculation is supplemented and supported by animal spirits, so that the thought of ultimate loss which often overtakes pioneers, as experience undoubtedly tells us and them, is put aside as a healthy man puts aside the expectation of death.

This means, unfortunately, not only that slumps and depressions are exaggerated in degree, but that economic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average business man. If the fear of a Labour Government or a New Deal depresses enterprise, this need not be the result either of a reasonable calculation or of a plot with political intent – it is the mere consequence of upsetting the delicate balance of spontaneous optimism. In estimating the prospects of investment, we must have regard, therefore, to the nerves and hysteria and even the digestions and reactions to the weather of those upon whose spontaneous activity it largely depends.

We should not conclude from this that everything depends on waves of irrational psychology. On the contrary, the state of long-term expectation is often steady, and, even when it is not, the other factors exert their compensating effects. We are merely reminding ourselves that human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectation, since the basis for making such calculations does not exist; and that it is our innate urge to activity which makes the wheels go round, our rational selves choosing between the alternatives as best we are able, calculating where we can, but

¹ G. Akerlof and R. Shiller (2009), *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*, Princeton University Press. R. Farmer (2010), *Expectations, Employment and Prices*, Oxford University Press.

often falling back for our motive on whim or sentiment or chance.'

These statements on animal spirits and the limits of mathematical expectations should be compared to the following treatment of 'the application of probability to conduct' to be found in Chapter 26 of *A Treatise on Probability*²:

'... I have argued that only in a strictly limited class of cases are degrees of probability numerically measurable. It follows from this that the "mathematical expectations" of goods or advantages are not always numerically measurable; and hence, that even if a meaning can be given to the sum of a series of non-numerical "mathematical expectations" not every pair of such sums are numerically comparable in respect of more and less. Thus even if we know the degree of advantage which might be obtained from each of a series of alternative courses of actions and know also the probability in each case of obtaining the advantage in question, it is not always possible by a mere process of arithmetic to determine which of the alternatives ought to be chosen. If, therefore, the question of right action is under all circumstances a determinate problem, it must be in virtue of an intuitive judgment directed to the situation as a whole, and not in virtue of an arithmetical deduction derived from a series of separate judgments directed to the individual alternatives each treated in isolation ... It has been pointed out already that no knowledge of probabilities, less in degree than certainty, helps us to know what conclusions are true, and that there is no direct relation between the truth of a proposition and its probability. Probability begins and ends with probability. That a scientific investigation pursued on account of its probability will generally lead to truth, rather than falsehood, is at the best only

² At the beginning of Chapter 12 of the *General Theory* Keynes refers to Chapter 6 of *A Treatise on Probability*, which deals with the difference between the weight of evidence and the probability of an argument. Clearly, an argument may have more weight, i.e. is based on more evidence, and be less probable. In any case, the point must be to reiterate the problems that induction (or reliance on evidence) faces, which could be another reason that intuition or animal spirits are needed.

probable. The proposition that a course of action guided by the most probable considerations will generally lead to success, is not certainly true and has nothing to recommend it but its probability.'

So, the point Keynes is making is one of logic rather than of psychology. Mathematical expectations either cannot be calculated or are only probable and thus cannot be sufficient motivation for action. Therefore, a healthy dose of optimism needs to be added to motivate long-term investment decisions. This is what Keynes calls 'animal spirits'. Of course, animal spirits can be dimmed because of swings in expected benefits or in the increase of risks (a topic Keynes also treats in Chapter 26 of *A Treatise on Probability*). So, the point is that animal spirits complement mathematical expectations equated with the expected benefits.

However, because mathematical expectations need to be supplemented by animal spirits, stabilizing expectations or updating them with new information will not be enough to influence positively long-term investments. That is the reason why Keynes did not put much emphasis on monetary policy, i.e. on the change in the interest rate, and did not believe that recessions are self-correcting due to the increase in the marginal productivity of capital, i.e. of profits. He, however, seems not to have put too much hope on animal spirits also because they can be dimmed and are volatile. That is why he stressed the role of public interest since at least his essay on *The End of Laissez-Faire* (1926). The public does not have to rely either on expected returns or on animal spirits. A similar view of public investments was taken by David Hume and also Adam Smith, partly for the same reasons. Individuals have a much shorter decision horizon than the public, at least in principle. Of course, Keynes was aware that public decisions are taken by individuals and they have a rather short-term view of their political careers as, for instance, do financial investors too.

In effect, Keynes argued that fiscal policy stabilizes consumption in the short run and investment in the

long run. Monetary policy can accomplish neither because it cannot stabilize expectations by targeting the interest rate.

So, that is as far as the role of animal spirits goes in Keynes. Akerlof and Shiller discuss various psychological influences on animal spirits (confidence, fairness, bad faith and corruption, money illusion, and stories). However, their assumption is that those influences exist and are important because the expected utility hypothesis (which assumes that individuals follow the dictate of a concrete expectation calculus) is violated. To them people are not motivated by maximization of expected returns; that is one of the most important claims of behavioural economics. So, animal spirits are a substitute for calculable expectations and not their complement. This is contrary to Keynes' understanding of the role of animal spirits.

Farmer models animal spirits as a random belief function. Specifically, he postulates that the 'representative' agent believes that the growth rate of nominal GDP follows a random walk (equated with 'shocks' to beliefs about the future). This is closer to Keynes' concept of animal spirits. Farmer's model may imply the self-fulfilling dynamics as well as the existence of multiple equilibria and be

consistent with their expectations being formed rationally at the same time. The multiple equilibria property of this model follows from the assumption that different levels of investment will bring about different (calculable to the representative agent) levels of returns (and of output or employment). This, however, is different from Keynes' concept because he did not think that the expected returns could be calculated, at least not with any confidence. Keynes' long-term investor does not peg his decisions on any value so there is nothing to be self-fulfilled. In fact, Keynes emphasizes that the outcome will generally be much more different from that which was expected. It is the disregard of that difference that animal spirits help to accomplish. Long-term investment begins and ends with uncertainty. This difference between Farmer and Keynes can account for Farmer's preference for monetary rather than fiscal policy which was what Keynes tended to emphasize in both the short and long run.

Keynes' concept of animal spirits is basically the consequence of his view of induction and probability and is neither an introduction of irrationality nor is it psychological. It is a matter of logic or rather of the deficiencies in inductive logic.

STATISTICAL ANNEX

Selected monthly data on the economic situation in Central, East and Southeast Europe

NEW: As of January 2011, time series for the three Baltic countries – **Estonia, Latvia, Lithuania** – are included in the wiiw Monthly Database.

Conventional signs and abbreviations used

.	data not available
%	per cent
PP	change in % against previous period
CPPY	change in % against corresponding period of previous year
CCPPY	change in % against cumulated corresponding period of previous year (e.g., under the heading 'March': January-March of the current year against January-March of the preceding year)
3MMA	3-month moving average, change in % against previous year
NACE Rev. 1	statistical classification of economic activities in the European Community, Rev. 1 (1990) / Rev. 1.1 (2002)
NACE Rev. 2	statistical classification of economic activities in the European Community, Rev. 2 (2008)
LFS	Labour Force Survey
CPI	consumer price index
HICP	harmonized index of consumer prices (for new EU member states)
PPI	producer price index
p.a.	per annum
mn	million (10 ⁶)
bn	billion (10 ⁹)
avg	average
eop	end of period
NCU	national currency unit (including 'euro-fixed' series for euro-area countries)

The following national currencies are used:

ALL	Albanian lek	HUF	Hungarian forint	RON	Romanian leu
BAM	Bosnian convertible mark	LVL	Latvian lats	RSD	Serbian dinar
BGN	Bulgarian lev	LTL	Lithuanian litas	RUB	Russian rouble
CZK	Czech koruna	MKD	Macedonian denar	UAH	Ukrainian hryvnia
HRK	Croatian kuna	PLN	Polish zloty		

EUR euro – national currency for Montenegro and for the euro-area countries Estonia (from January 2011, euro-fixed before), Slovakia (from January 2009, 'euro-fixed before) and Slovenia (from January 2007, 'euro-fixed' before)

USD US dollar

M1 currency outside banks + demand deposits / narrow money (ECB definition)

M2 M1 + quasi-money / intermediate money (ECB definition)

M3 broad money

Sources of statistical data: Eurostat, national statistical offices and central banks; wiiw estimates.

wiiw Members have **free online access** to the wiiw Monthly Database.

To receive your personal password, please go to <http://mdb.wiiw.ac.at>

ALBANIA: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010										2011		
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
LABOUR																
Employment total, registered	th. pers., quart. avg	.	899.3	.	.	900.7	.	.	904.9	.	.	916.0	.	.	916.9	.
Employment total, registered	CPPY	.	-7.7	.	.	-7.4	.	.	-7.0	.	.	-5.7	.	.	2.0	.
Unemployment, registered	th. pers., quart. avg	.	143.3	.	.	144.6	.	.	144.6	.	.	143.2	.	.	143.0	.
Unemployment rate, registered	%	.	13.8	.	.	13.8	.	.	13.8	.	.	13.5	.	.	13.5	.
PRICES																
Consumer	PP	0.4	1.6	0.9	1.1	0.1	-0.4	-1.2	-0.5	-0.5	0.8	0.7	0.2	0.2	2.2	0.8
Consumer	CPPY	3.0	3.7	4.2	4.6	4.0	3.7	3.3	3.2	3.4	3.5	3.4	3.0	2.8	3.3	3.3
Consumer	CCPPY	2.2	2.3	4.2	4.4	4.3	4.1	4.0	3.8	3.8	3.7	3.7	3.6	3.6	3.5	3.3
Producer, in industry	PP	-0.2	0.3	2.1	0.3	1.0	-0.3	-0.4	0.3	0.6	0.1	0.3	.	.	.	.
Producer, in industry	CPPY	-1.0	-0.7	-0.6	-0.4	0.4	0.3	0.0	0.4	0.1	0.4	0.5	.	.	.	.
Producer, in industry	CCPPY	-1.7	-1.7	-0.6	-0.5	-0.2	-0.1	0.0	0.0	0.0	0.1	0.1	.	.	.	.
FOREIGN TRADE																
Exports total (fob), cumulated	EUR mn	706	778	69	151	255	346	475	596	695	766	866	971	1073	1172	.
Imports total (cif), cumulated	EUR mn	2943	3258	218	448	723	999	1302	1601	1928	2224	2523	2823	3123	3475	.
Trade balance, cumulated	EUR mn	-2237	-2479	-149	-298	-467	-653	-827	-1005	-1233	-1458	-1657	-1852	-2050	-2303	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-1229	-1346	-66	-159	-247	-318	-377	-463	-522	-626	-673	.	.	.	.
EXCHANGE RATE																
ALL/EUR, monthly average	nominal	137.70	137.17	138.28	138.80	139.20	138.36	136.72	136.65	136.11	136.24	137.05	138.39	138.82	138.81	138.65
ALL/USD, monthly average	nominal	92.34	93.98	96.84	101.34	102.51	103.02	108.73	111.89	106.63	105.59	104.81	99.60	101.33	104.95	103.84
EUR/ALL, calculated with CPI ¹⁾	real, Jan07=100	90.5	92.0	92.5	92.9	92.0	91.7	91.6	91.1	91.2	91.6	91.6	90.6	90.3	91.8	92.7
EUR/ALL, calculated with PPI ¹⁾	real, Jan07=100	92.9	93.4	93.8	93.5	93.5	93.1	93.4	93.4	94.3	95.0	94.3	.	.	.	.
USD/ALL, calculated with CPI ¹⁾	real, Jan07=100	103.9	104.0	101.5	98.0	96.6	95.5	89.3	86.4	90.2	91.7	92.9	97.9	96.4	94.9	96.2
USD/ALL, calculated with PPI ¹⁾	real, Jan07=100	103.0	101.1	98.1	94.6	93.2	91.9	86.6	85.0	89.5	90.1	90.9	.	.	.	.
DOMESTIC FINANCE																
Currency outside banks	ALL bn, eop	200.8	209.0	199.1	197.4	195.2	193.1	193.5	193.9	197.2	197.0	191.3	190.9	189.4	.	.
M1	ALL bn, eop	272.8	284.5	269.4	266.6	268.5	263.4	265.6	268.9	274.4	276.4	272.5	269.8	266.9	.	.
M2	ALL bn, eop	858.5	871.5	880.1	882.4	887.9	886.3	897.8	902.3	913.6	940.0	948.4	952.0	961.4	.	.
M2	CPPY, eop	7.3	6.8	7.8	8.8	10.2	9.3	10.0	10.1	11.2	11.2	12.4	11.7	12.0	.	.
Central bank policy rate (p.a.) ²⁾	% eop	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Central bank policy rate (p.a.) ²⁾³⁾	real, % eop	6.3	6.0	5.9	5.7	4.8	4.9	5.2	4.8	4.9	4.5	4.4	.	.	.	.
BUDGET																
General gov. budget balance, cum.	ALL bn	-64454	-80361	4652	606	699	-1271	-11303	-15600	-22799	-23179	-23916	-23259	-23057	-37073	.

1) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

2) One-week repo rate.

3) Deflated with annual PPI.

Source: wiw Database incorporating national statistics.

BOSNIA and HERZEGOVINA: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010												2011
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
PRODUCTION																
Industry, total ¹⁾	real, CPPY	-10.5	-4.5	-0.5	-0.5	4.3	2.7	5.2	-4.3	-4.7	7.1	-1.2	-0.1	2.0	8.7	.
Industry, total ¹⁾	real, CCPY	-4.3	-3.3	-0.5	-0.4	1.3	1.7	2.6	1.3	0.2	1.1	0.8	0.8	0.9	1.6	.
Industry, total ¹⁾	real, 3MMA	-5.5	-5.2	-1.8	1.1	2.2	4.1	1.2	-1.3	-0.6	0.4	1.9	0.2	3.5	.	.
LABOUR																
Employees total, registered ²⁾	th. persons, avg	694.1	694.4	692.4	691.8	681.3	681.9	682.3	682.1	682.0	680.8	689.4	690.3	690.4	688.7	.
Employees total, registered ²⁾	CPPY, avg	-2.2	-1.7	-1.7	-1.8	-2.5	-2.3	-2.2	-2.3	-2.2	-2.1	-0.6	-0.5	-0.5	-0.8	.
Unemployment, registered ³⁾	th. persons, eop	506.5	510.5	516.2	519.3	519.2	516.0	512.3	511.8	516.0	517.6	517.0	517.2	519.1	.	.
Unemployment rate, registered ³⁾	%, eop	42.2	42.4	42.7	42.9	43.2	43.1	42.9	42.9	43.1	43.2	43.1	42.8	42.9	.	.
WAGES																
Total economy, gross	BAM	1204	1223	1203	1190	1215	1217	1211	1216	1216	1219	1220	1213	1229	1250	.
Total economy, gross	real, CPPY	5.5	3.4	-0.5	-2.9	-1.0	-1.7	-1.5	-1.7	-1.0	0.3	0.0	-1.1	-0.2	-0.9	.
Total economy, gross	EUR	616	625	615	608	621	622	619	622	622	623	624	620	628	639	.
PRICES																
Consumer	PP	0.1	0.1	1.4	0.1	0.2	-0.7	0.0	0.0	0.0	-0.2	0.3	0.9	0.3	0.8	.
Consumer	CPPY	-0.7	0.0	1.5	1.6	2.0	2.4	2.6	2.4	1.7	1.7	1.9	2.2	2.3	3.1	.
Consumer	CCPPY	-0.4	-0.4	1.5	1.6	1.7	1.9	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	.
FOREIGN TRADE																
Exports total (fob), cumulated	EUR mn	2577	2817	214	478	787	1090	1399	1728	2054	2352	2673	2977	3316	3627	.
Imports total (cif), cumulated	EUR mn	5731	6301	368	851	1406	1984	2584	3184	3817	4414	5068	5688	6302	6957	.
Trade balance, cumulated	EUR mn	-3155	-3484	-153	-373	-619	-893	-1185	-1457	-1763	-2062	-2395	-2711	-2986	-3330	.
Exports to EU-27 (fob), cumulated	EUR mn	1407	1527	132	279	443	606	782	961	1133	1283	1463	1639	1822	1978	.
Imports from EU-27 (cif), cumulated	EUR mn	2876	3134	167	394	661	932	1196	1475	1773	2027	2314	2604	2887	3193	.
Trade balance with EU-27, cumulated	EUR mn	-1469	-1606	-35	-115	-218	-327	-414	-514	-640	-744	-851	-965	-1065	-1215	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-840	.	.	-62	.	.	-240	.	.	-533	.	.	.	.
EXCHANGE RATE																
BAM/EUR, monthly average	nominal	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956
BAM/USD, monthly average	nominal	1.314	1.337	1.370	1.431	1.441	1.457	1.548	1.602	1.534	1.517	1.503	1.408	1.429	1.481	1.466
EUR/BAM, calculated with CPI ⁴⁾	real, Jan07=100	103.0	102.8	104.7	104.5	103.9	102.7	102.5	102.7	102.3	102.4	102.4	102.9	103.1	103.3	.
USD/BAM, calculated with CPI ⁴⁾	real, Jan07=100	117.9	116.2	114.5	109.8	108.7	106.6	100.2	97.0	101.2	102.0	103.1	111.0	109.7	106.4	.
DOMESTIC FINANCE																
Currency outside banks	BAM mn, eop	1955	2010	2002	2006	1975	2005	1981	1990	2073	2065	2109	2144	2115	2210	.
M1	BAM mn, eop	5565	5888	5880	5852	5882	6013	6045	5862	6090	6179	6114	6218	6210	6343	.
M2	BAM mn, eop	12553	12910	12890	12940	13119	13277	13310	13307	13449	13695	13488	13622	13714	13868	.
M2	CPPY, eop	0.2	2.1	3.8	4.1	6.3	7.9	7.8	8.0	8.4	9.1	7.3	8.3	9.2	7.4	.

1) Federation of B&H and Republic Srpska weighted by wiiw.

2) Sum of employees in Federation of B&H, Republic Srpska and District Brcko, calculated by wiiw.

3) Sum of unemployed persons in Federation B&H, Republic Srpska and District Brcko, calculated by wiiw.

4) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

Source: wiiw Database incorporating national statistics.

CROATIA: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010												2011
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
PRODUCTION																
Industry, NACE Rev. 2 ¹⁾	real, CPPY	-8.5	-5.7	-0.1	-1.3	-0.2	-5.5	-1.9	-2.4	-3.3	0.9	3.0	-5.9	0.2	0.9	.
Industry, NACE Rev. 2 ¹⁾	real, CCPPY	-9.6	-9.3	-0.1	-0.7	-0.5	-1.9	-1.9	-2.0	-2.2	-1.8	-1.3	-1.8	-1.6	-1.4	.
Industry, NACE Rev. 2 ¹⁾	real, 3MMA	-7.7	-5.1	-2.6	-0.5	-2.4	-2.6	-3.3	-2.5	-1.7	0.1	-0.8	-1.0	-1.7	.	.
Construction, NACE Rev. 2 ¹⁾	real, CPPY	-9.7	-13.1	-18.4	-21.4	-16.3	-17.2	-16.1	-17.2	-19.2	-11.7	-14.3	-14.9	-12.1	.	.
Construction, NACE Rev. 2 ¹⁾	real, CCPPY	-6.0	-6.5	-18.4	-20.0	-18.6	-18.2	-17.8	-17.7	-17.9	-17.2	-16.9	-16.7	-16.3	.	.
LABOUR																
Employment total, registered	th. persons, avg	1189.6	1178.8	1165.0	1154.8	1151.6	1153.8	1158.0	1163.0	1166.7	1165.1	1156.2	1148.0	1140.9	1131.0	.
Employees in industry, reg., NACE Rev. 2	th. persons, avg	251.2	248.7	244.6	243.9	243.0	242.6	242.3	242.3	242.6	242.7	241.6	240.7	239.8	237.6	.
Unemployment, registered	th. persons, eop	282.9	291.5	309.6	317.6	318.7	308.7	296.4	285.8	282.8	283.3	289.5	304.5	312.4	319.8	.
Unemployment rate, registered	%, eop	16.1	16.7	17.8	18.3	18.4	17.9	17.2	16.6	16.4	16.4	16.9	17.8	18.3	18.8	.
Productivity in industry, NACE Rev. 2 ¹⁾	CCPPY	-0.3	0.1	9.5	8.6	8.7	7.0	6.9	6.6	6.3	6.5	6.9	6.2	6.2	6.3	.
WAGES																
Total economy, gross	HRK	7808	7783	7615	7457	7831	7606	7662	7763	7608	7707	7546	7650	7892	.	.
Total economy, gross	real, CPPY	-2.0	-2.9	-2.3	-2.5	-0.7	-1.8	-1.9	-1.2	-2.4	0.1	-1.7	-1.3	-0.1	.	.
Total economy, gross	EUR	1072	1067	1044	1021	1079	1048	1056	1074	1055	1064	1036	1045	1070	.	.
Industry, gross, NACE Rev. 2	EUR	959	964	933	907	985	946	945	984	966	947	939	932	990	.	.
PRICES																
Consumer	PP	0.4	-0.6	0.5	0.2	0.4	0.4	0.2	-0.1	-0.4	-0.2	0.3	0.1	0.3	0.0	.
Consumer	CPPY	1.8	1.9	1.1	0.7	0.9	0.6	0.8	0.7	1.0	0.9	1.4	1.4	1.2	1.8	.
Consumer	CCPPY	2.4	2.4	1.1	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.9	1.0	1.0	1.1	.
Producer, in industry, NACE Rev. 2 ²⁾	PP	0.2	0.0	1.3	-0.1	0.9	0.6	0.5	0.4	0.0	0.3	0.4	0.3	-0.1	1.0	0.7
Producer, in industry, NACE Rev. 2 ²⁾	CPPY	0.2	1.6	3.0	2.7	4.9	5.0	4.9	4.4	3.8	3.3	4.4	4.9	4.7	5.7	5.1
Producer, in industry, NACE Rev. 2 ²⁾	CCPPY	-0.6	-0.4	3.0	2.9	3.5	3.9	4.1	4.2	4.1	4.0	4.0	4.1	4.2	4.3	5.1
FOREIGN TRADE																
Exports total (fob), cumulated	EUR mn	6891	7529	617	1202	2000	2685	3528	4279	4996	5675	6450	7352	8124	8902	.
Imports total (cif), cumulated	EUR mn	14029	15225	957	2015	3338	4594	5880	7188	8531	9803	11156	12409	13804	15129	.
Trade balance, cumulated	EUR mn	-7139	-7695	-340	-813	-1338	-1909	-2351	-2909	-3535	-4128	-4707	-5057	-5680	-6226	.
Exports to EU-27 (fob), cumulated	EUR mn	4208	4560	380	724	1225	1662	2222	2688	3114	3523	4003	4528	5038	5439	.
Imports from EU-27 (cif), cumulated	EUR mn	8811	9547	503	1147	1963	2765	3562	4348	5161	5847	6620	7380	8244	9107	.
Trade balance with EU-27, cumulated	EUR mn	-4603	-4986	-122	-423	-738	-1103	-1340	-1661	-2047	-2324	-2617	-2852	-3206	-3668	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-2477	.	.	-1393	.	.	-1575	.	.	273	.	.	.	.
EXCHANGE RATE																
HRK/EUR, monthly average	nominal	7.284	7.292	7.291	7.305	7.261	7.258	7.258	7.229	7.212	7.246	7.283	7.321	7.373	7.393	7.396
HRK/USD, monthly average	nominal	4.885	4.980	5.098	5.327	5.347	5.405	5.753	5.922	5.667	5.614	5.593	5.270	5.384	5.595	5.538
EUR/HRK, calculated with CPI ³⁾	real, Jan07=100	105.0	103.9	104.9	104.6	104.9	104.8	104.9	105.1	105.2	104.3	103.9	103.1	102.5	101.6	.
EUR/HRK, calculated with PPI ³⁾	real, Jan07=100	108.0	107.8	108.3	107.7	108.6	108.4	108.5	109.0	109.1	109.6	109.1	108.7	107.5	107.4	108.1
USD/HRK, calculated with CPI ³⁾	real, Jan07=100	120.3	117.5	114.9	110.2	109.8	108.8	102.3	99.4	103.5	104.0	104.6	111.0	109.0	104.7	.
USD/HRK, calculated with PPI ³⁾	real, Jan07=100	119.4	116.7	113.1	108.7	107.9	106.7	100.6	98.8	102.9	103.8	104.5	110.2	107.2	103.1	.
DOMESTIC FINANCE																
Currency outside banks	HRK bn, eop	15.0	15.3	14.8	14.8	14.8	15.1	15.4	16.0	16.9	16.7	16.0	15.7	15.0	15.3	.
M1	HRK bn, eop	45.7	47.2	48.1	48.7	47.7	49.0	48.0	49.7	50.7	51.2	51.7	50.7	48.3	49.2	.
Broad money	HRK bn, eop	223.6	223.1	223.5	223.3	222.0	222.1	222.6	224.6	227.0	231.6	232.7	232.4	232.5	232.9	.
Broad money	CPPY, eop	2.5	-0.9	0.9	0.9	1.6	1.5	2.0	2.8	2.5	3.2	3.8	5.1	4.0	4.4	.
Central bank policy rate (p.a.) ⁴⁾	%, eop	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Central bank policy rate (p.a.) ⁴⁾⁵⁾	real, %, eop	5.8	4.3	2.9	3.2	1.1	0.9	1.0	1.6	2.1	2.6	1.5	1.0	1.3	0.3	0.8
BUDGET																
Central gov. budget balance, cum. ⁶⁾	HRK mn	-8976	-10068	-1864	-3387	-5216	-5191	-6566	-7284	-8212	-8347	-9397	-9064	-10634	.	.

1) Enterprises with 20 and more employees.

2) Data refer to industry total (including E - electricity, gas, steam, air conditioning supply etc.) compared to previously published domestic producer prices.

3) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

4) Average weighted repo rates.

5) Deflated with annual PPI.

6) Consolidated central government budget.

Source: wiw Database incorporating national statistics.

MACEDONIA: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010										2011			
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
PRODUCTION																	
Industry, total ¹⁾	real, CPPY	4.4	20.0	-3.0	-13.1	-11.2	-9.6	-0.4	5.4	8.4	-1.4	-11.8	-4.4	-1.5	-7.7	.	
Industry, total ¹⁾	real, CCPY	-9.9	-7.7	-3.0	-8.3	-9.4	-9.5	-7.6	-5.3	-3.3	-3.0	-4.2	-4.2	-4.0	-4.3	.	
Industry, total ¹⁾	real, 3MMA	7.5	7.8	2.2	-9.4	-11.2	-7.1	-1.6	4.5	4.0	-2.3	-6.1	-6.0	-4.6	.	.	
Construction, total, effect. work. time	real, CPPY	2.3	-12.5	7.6	-5.1	3.0	12.5	13.0	8.4	4.9	8.1	0.6	1.3	6.9	.	.	
Construction, total, effect. work. time	real, CCPY	-1.0	-2.1	7.6	0.7	1.6	4.3	6.1	6.5	6.2	6.5	5.8	5.3	5.5	.	.	
LABOUR																	
Employed persons, LFS	th. pers., quart. avg	.	622.7	.	.	615.9	.	.	627.1	.	.	648.8	.	.	.	.
Employed persons, LFS	CCPPY	.	3.4	.	.	-0.4	.	.	-0.9	.	.	-0.3	.	.	.	.
Unemployed persons, LFS	th. pers., quart. avg	.	298.8	.	.	309.6	.	.	296.2	.	.	300.5	.	.	.	.
Unemployment rate, LFS	%, avg	.	32.4	.	.	33.5	.	.	32.1	.	.	31.7	.	.	.	.
Labour productivity, industry ¹⁾	CCPPY	-3.6	-1.1	4.5	-1.1	-2.5	-2.4	-0.5	1.6	3.3	3.0	1.2	0.7	0.7	.	.	
Unit labour costs, exch.r. adj.(EUR) ¹⁾	CCPPY	12.3	9.4	1.0	13.0	12.6	10.7	8.2	4.9	2.6	2.7	4.2	4.5	4.3	.	.	
WAGES																	
Total economy, gross	MKD	29829	30611	29947	29751	29938	30081	30598	30035	29827	30207	30263	30279	30349	31435	.	.
Total economy, gross	real, CPPY	10.8	9.6	1.2	0.6	0.5	-1.6	1.8	-2.2	-1.5	-0.8	-1.6	-2.6	-1.5	-0.3	.	.
Total economy, gross	EUR	488	500	489	484	486	488	497	488	485	491	491	491	493	511	.	.
Industry, gross	EUR	408	425	416	450	417	413	420	413	414	422	423	423	421	.	.	.
PRICES																	
Consumer	PP	0.3	1.0	0.7	0.4	0.5	0.6	-0.6	0.2	-0.4	0.1	0.1	0.3	0.4	0.7	0.9	.
Consumer	CCPY	-2.3	-1.6	0.1	0.6	0.7	1.4	0.2	1.8	1.5	1.9	2.0	2.7	2.9	3.0	3.2	.
Consumer	CCPPY	-0.7	-0.8	0.1	0.3	0.5	0.7	0.6	0.8	0.9	1.0	1.1	1.3	1.4	1.7	3.2	.
Producer, in industry	PP	0.4	0.4	0.1	1.3	1.0	3.0	1.4	-0.9	0.4	0.1	0.6	0.9	-1.1	2.2	.	.
Producer, in industry	CCPY	1.5	3.2	6.5	7.4	8.8	10.4	10.9	7.7	7.6	7.7	7.8	8.7	7.1	9.0	.	.
Producer, in industry	CCPPY	-7.4	-6.5	6.5	6.9	7.5	8.3	8.8	8.6	8.4	8.3	8.3	8.3	8.2	8.3	.	.
FOREIGN TRADE																	
Exports total (fob), cumulated	EUR mn	1751	1924	131	289	479	662	869	1095	1329	1531	1782	2015	2267	2491	.	.
Imports total (cif), cumulated	EUR mn	3280	3498	224	484	804	1157	1489	1853	2212	2576	2898	3274	3673	4112	.	.
Trade balance, cumulated	EUR mn	-1528	-1574	-93	-195	-324	-495	-621	-758	-883	-1044	-1116	-1260	-1406	-1621	.	.
Exports to EU-27 (fob), cumulated	EUR mn	983	1082	90	183	294	404	531	672	818	932	1089	1229	1391	1531	.	.
Imports from EU-27 (cif), cumulated	EUR mn	1714	1817	106	232	412	610	796	973	1164	1338	1527	1745	1956	2188	.	.
Trade balance with EU-27, cumulated	EUR mn	-730	-735	-16	-48	-118	-206	-264	-302	-346	-406	-438	-516	-564	-657	.	.
FOREIGN FINANCE																	
Current account, cumulated	EUR mn	-427	-449	-42	-61	-74	-113	-118	-117	-93	-90	-33	-68	-83	.	.	.
EXCHANGE RATE																	
MKD/EUR, monthly average	nominal	61.17	61.18	61.18	61.42	61.60	61.60	61.53	61.51	61.52	61.51	61.63	61.62	61.55	61.50	61.51	.
MKD/USD, monthly average	nominal	41.07	41.81	42.83	44.93	45.40	45.90	48.79	50.38	48.25	47.71	47.35	44.37	44.97	46.55	45.97	.
EUR/MKD, calculated with CPI ²⁾	real, Jan07=100	100.3	100.9	102.1	101.8	101.2	101.3	100.7	100.9	100.7	100.6	100.3	100.3	100.6	100.8	101.7	.
EUR/MKD, calculated with PPI ²⁾	real, Jan07=100	105.4	105.7	104.9	105.6	105.6	107.9	109.0	107.7	108.0	108.9	108.9	109.7	108.3	109.8	.	.
USD/MKD, calculated with CPI ²⁾	real, Jan07=100	114.8	114.1	111.8	106.9	105.9	105.2	98.3	95.5	99.3	100.3	101.1	108.1	107.1	103.9	105.7	.
USD/MKD, calculated with PPI ²⁾	real, Jan07=100	116.5	114.5	109.6	106.3	104.9	106.2	101.2	97.8	102.2	103.0	104.3	111.3	108.0	105.6	.	.
DOMESTIC FINANCE																	
Currency outside banks	MKD bn, eop	14.5	16.3	15.5	15.1	14.8	15.2	15.5	15.7	16.7	16.2	15.9	16.1	15.6	17.0	15.8	.
M1	MKD bn, eop	49.1	52.2	50.0	50.7	50.3	50.6	52.9	52.5	52.7	53.6	53.8	53.8	54.0	57.4	54.6	.
Broad money	MKD bn, eop	201.4	207.3	208.1	208.3	210.7	215.0	219.4	220.4	216.1	220.0	221.9	224.5	229.1	232.6	232.0	.
Broad money	CCPY, eop	5.9	6.0	8.0	8.0	10.7	11.7	15.0	14.8	12.8	12.4	13.4	12.3	13.7	12.2	11.5	.
Central bank policy rate (p.a.) ³⁾	%, eop	9.0	8.5	8.0	7.6	7.3	6.5	6.2	5.5	5.0	4.7	4.5	4.5	4.5	4.1	4.0	.
Central bank policy rate (p.a.) ³⁾⁴⁾	real, %, eop	7.4	5.1	1.4	0.2	-1.4	-3.6	-4.2	-2.1	-2.4	-2.8	-3.1	-3.9	-2.4	-4.5	.	.
BUDGET																	
General gov.budget balance, cum. ⁵⁾	MKD mn	-10369	-10904	-2318	-4057	-4104	-4762	-5674	-6077	-5221	-5417	-6587	-7720	-8662	.	.	.

1) In business entities with more than 10 persons employed.

2) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

3) Central bank bills (28-days).

4) Deflated with annual PPI.

5) Central government budget plus extra-budgetary funds.

Source: wiw Database incorporating national statistics.

MONTENEGRO: Selected monthly data on the economic situation 2009 to 2011

		(updated end of Feb 2011)												2011		
		2009		2010										2011		
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
PRODUCTION																
Industry, total	real, CPPY	-45.6	-24.5	-11.8	-21.6	-8.4	8.5	15.7	39.4	16.1	27.2	55.2	37.1	48.4	45.7	2.0
Industry, total	real, CCPY	-33.4	-32.7	-11.8	-16.7	-13.9	-9.1	-5.4	0.0	1.8	3.8	8.2	10.6	13.5	16.3	2.0
Industry, total	real, 3MMA	-36.2	-28.0	-19.3	-13.9	-8.2	3.7	19.9	23.4	27.5	32.5	40.4	46.7	43.9	29.5	.
LABOUR																
Employment total, registered ¹⁾	th. persons, avg	174.7	169.9	172.3	171.6	171.3	158.2	158.7	159.2	160.2	158.5	157.6	155.0	157.7	158.8	.
Employment in industry, registered	th. persons, avg	28.7	27.4	27.6	26.6	26.6	18.6	22.2	21.8	21.9	22.0	22.1	22.3	22.0	.	.
Unemployment, registered	th. persons, eop	29.6	30.2	31.1	32.4	33.1	33.2	32.4	31.3	31.1	30.6	31.0	31.9	32.2	31.1	.
Unemployment rate, registered	%, eop	14.5	15.1	15.3	15.9	16.2	17.3	16.9	16.4	16.3	16.2	16.5	16.8	17.0	16.4	.
Labour productivity, industry	CCPY	-26.2	-24.6	6.3	1.6	4.1	18.2	24.7	33.4	36.6	39.5	45.0	47.9	51.4	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPY	33.5	30.9	-0.2	5.4	5.3	-6.2	-10.0	-15.2	-17.2	-17.5	-19.9	-20.7	-22.1	.	.
WAGES																
Total economy, gross	EUR	633	653	702	691	693	693	727	706	696	752	717	711	716	768	772
Total economy, gross	real, CCPY	-1.8	-1.3	5.6	5.4	7.0	6.7	11.5	8.9	8.5	17.4	13.3	11.8	12.3	16.8	8.6
Industry, gross	EUR	660	702	762	764	751	696	785	775	747	786	810	832	827	.	.
PRICES																
Consumer	PP	0.0	0.1	-0.3	0.1	0.4	0.1	-0.1	-0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.3
Consumer	CCPY	2.3	1.5	0.8	0.2	0.7	0.4	0.3	0.2	1.0	-0.1	0.3	0.5	0.7	0.7	1.3
Consumer	CCPY	3.6	3.4	0.8	0.5	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.6	0.6	1.3
Producer, in industry	PP	0.4	0.3	-2.4	-0.8	-0.8	1.6	3.8	-0.7	-0.9	0.3	0.2	-0.3	-0.3	-0.1	2.0
Producer, in industry	CCPY	-7.2	-2.9	-4.2	-5.0	-4.6	-3.4	1.2	1.5	2.1	1.8	1.4	0.6	-0.1	-0.5	4.0
Producer, in industry	CCPY	-3.7	-3.9	-4.2	-6.3	-5.7	-5.2	-3.1	-2.3	-1.7	-1.3	-1.0	-0.8	-0.8	-0.8	4.0
FOREIGN TRADE																
Exports total (fob), cumulated	EUR mn	253	277	14	32	56	82	118	142	172	202	229	258	301	330	37
Imports total (cif), cumulated	EUR mn	1498	1654	74	181	311	447	585	754	927	1083	1225	1363	1507	1655	85
Trade balance, cumulated	EUR mn	-1245	-1377	-60	-149	-255	-366	-468	-612	-755	-881	-996	-1106	-1206	-1324	-47
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-896	.	.	-243	.	.	-512	.	.	-503	.	.	.	.
EXCHANGE RATE																
EUR/USD, monthly average	nominal	0.671	0.684	0.701	0.731	0.737	0.746	0.796	0.819	0.783	0.776	0.765	0.720	0.732	0.756	0.749
USD/EUR, calculated with CPI ²⁾	real, Jan07=100	94.7	96.9	98.5	102.9	103.7	104.9	111.7	114.6	109.8	108.6	107.2	100.9	102.8	106.2	104.8
USD/EUR, calculated with PPI ²⁾	real, Jan07=100	94.8	96.6	94.6	98.3	97.1	99.3	109.7	112.9	106.7	105.6	104.3	96.9	97.7	99.8	100.0
DOMESTIC FINANCE																
Central bank policy rate (p.a.) ³⁾	%, eop	9.5	9.4	9.4	9.5	9.5	9.5	9.5	9.5	9.6	9.6	9.6	9.6	9.6	9.6	.
Central bank policy rate (p.a.) ³⁽⁴⁾	real, %, eop	17.9	12.6	14.2	15.3	14.7	13.3	8.2	7.9	7.3	7.7	8.1	9.0	9.7	10.2	.
BUDGET																
General gov.budget balance, cum.	EUR mn	.	-106	.	.	-37	.	.	-12	.	.	0	.	.	.	.

- 1) Excluding individual farmers. From March according to Tax Administration source, before Employment Agency.
- 2) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
- 3) Average weighted lending interest rate of commercial banks (Montenegro uses the euro as national currency).
- 4) Deflated with annual PPI.

Source: wiw Database incorporating national statistics.

S E R B I A: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010										2011		
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
PRODUCTION																
Industry, total	real, CPPY	-3.3	0.0	3.7	2.6	2.6	12.5	7.2	3.8	6.6	3.6	4.1	-1.9	0.2	0.0	3.8
Industry, total	real, CCPPY	-12.0	-11.0	3.7	3.0	2.8	4.8	5.4	4.6	4.8	4.7	4.4	3.7	3.2	3.0	3.8
Industry, total	real, 3MMA	-2.7	-0.2	1.9	2.9	5.7	7.2	7.7	5.9	4.7	4.8	1.8	0.7	-0.6	1.1	.
LABOUR																
Employees total, registered	th. persons, avg	1377.0	1373.0	1366.0	1362.0	1362.0	1359.0	1358.0	1356.0	1353.0	1350.0	1348.0	1346.0	1346.0	.	.
Employees in industry, registered	th. persons, avg	398.0	395.0	391.0	389.0	387.0	384.0	381.0	380.0	380.0	377.0	375.0	374.0	373.0	.	.
Unemployment, registered	th. persons, eop	723.4	730.4	751.6	767.4	778.5	772.2	762.6	746.8	737.0	724.3	721.0	717.5	721.1	.	.
Unemployment rate, registered	% eop	24.7	24.9	25.5	25.9	26.4	26.3	26.1	25.7	25.5	25.2	25.3	25.3	25.4	.	.
Labour productivity, industry	CCPPY	-5.4	-4.3	11.7	11.3	10.9	13.1	13.5	13.0	13.0	12.7	12.5	11.6	11.1	.	.
Unit labour costs, exch.r. adj.(EUR)	CCPPY	-3.3	-4.0	-6.5	-8.0	-5.7	-5.5	-6.4	-6.3	-6.8	-7.0	-7.2	-6.8	-6.9	.	.
WAGES ¹⁾																
Total economy, gross	RSD	43895	51115	41651	44871	46457	48525	46454	47486	48394	47190	48016	47822	47877	54948	47382
Total economy, gross	real, CPPY	-0.6	0.3	-1.1	0.0	5.6	3.1	3.9	3.7	2.4	2.0	2.9	-0.2	-0.4	-2.2	2.7
Total economy, gross	EUR	466	533	428	454	466	488	460	459	462	448	455	450	447	517	451
Industry, gross	EUR	426	480	416	418	433	468	439	443	444	428	427	430	426	.	.
PRICES																
Consumer	PP	0.8	-0.1	0.6	0.2	1.1	0.6	1.3	0.0	-0.2	1.7	1.1	1.1	1.7	0.3	1.4
Consumer	CPPY	5.8	6.5	4.7	4.9	4.3	3.8	3.5	3.5	4.3	6.1	7.1	8.5	9.5	9.9	10.8
Consumer	CCPPY	7.9	7.8	4.7	4.8	4.6	4.4	4.2	4.1	4.1	4.4	4.7	5.1	5.5	5.9	10.8
Producer, in industry	PP	1.3	0.1	1.8	1.1	2.7	1.9	0.8	1.2	0.2	1.5	1.4	0.5	1.3	1.2	.
Producer, in industry	CPPY	6.5	7.3	11.0	10.2	12.2	13.2	12.5	11.5	12.1	12.5	14.7	15.5	15.5	16.7	.
Producer, in industry	CCPPY	5.4	5.6	11.0	10.6	11.1	11.6	11.8	11.8	11.8	11.9	12.2	12.6	12.8	12.7	.
FOREIGN TRADE																
Exports total (fob), cumulated	EUR mn	5449	5957	397	870	1465	2047	2662	3347	3991	4589	5273	5953	6663	7388	.
Imports total (cif), cumulated	EUR mn	10751	11760	737	1997	3057	4024	4985	6076	6960	8019	9188	10219	11401	12603	.
Trade balance, cumulated	EUR mn	-5302	-5803	-340	-1127	-1592	-1977	-2323	-2730	-2968	-3430	-3916	-4266	-4738	-5215	.
Exports to EU-27 (fob), cumulated	EUR mn	2917	3194	253	627	874	1191	1571	1942	2281	2621	3013	3406	3838	4231	.
Imports from EU-27 (cif), cumulated	EUR mn	5973	6532	390	1114	1494	2092	2692	3277	3898	4510	5113	5756	6408	7061	.
Trade balance with EU-27, cumulated	EUR mn	-3056	-3338	-137	-487	-620	-901	-1120	-1334	-1617	-1889	-2100	-2350	-2571	-2830	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	-1896	-2084	-140	-447	-760	-896	-1086	-1370	-1523	-1667	-1893	-1996	-2155	.	.
EXCHANGE RATE																
RSD/EUR, monthly average	nominal	94.27	95.98	97.29	98.80	99.70	99.40	100.98	103.51	104.70	105.30	105.44	106.33	107.07	106.31	105.14
RSD/USD, monthly average	nominal	63.17	65.76	68.13	72.13	73.44	74.05	80.54	84.71	82.05	81.57	80.84	76.55	78.30	79.81	78.65
EUR/RSD, calculated with CPI ²⁾	real, Jan07=100	101.6	99.3	99.0	97.4	96.8	97.2	96.8	94.4	93.3	94.2	94.9	94.8	95.6	96.1	98.5
EUR/RSD, calculated with PPI ²⁾	real, Jan07=100	103.7	101.9	101.4	100.7	101.8	103.2	101.9	100.3	99.2	100.9	101.8	101.2	101.5	102.6	.
USD/RSD, calculated with CPI ²⁾	real, Jan07=100	116.6	112.1	108.4	102.6	101.5	101.0	94.0	89.5	92.2	94.1	95.9	102.3	101.7	99.9	102.3
USD/RSD, calculated with PPI ²⁾	real, Jan07=100	114.9	110.1	105.9	101.7	101.2	101.7	94.0	91.1	94.0	95.6	97.7	102.8	101.2	99.4	.
DOMESTIC FINANCE																
Currency outside banks	RSD bn, eop	83.5	95.5	89.2	89.9	85.9	89.4	84.9	87.7	93.1	87.8	89.8	95.0	85.2	91.8	.
M1	RSD bn, eop	229.4	258.4	237.0	234.3	224.9	229.4	232.8	234.0	240.6	238.3	242.9	248.9	236.5	253.3	223.9
Broad money ³⁾	RSD bn, eop	1155.0	1205.6	1209.3	1216.6	1217.8	1226.5	1278.8	1296.2	1331.4	1288.9	1306.0	1330.2	1361.9	1361.5	1324.1
Broad money ³⁾	CPPY, eop	15.5	21.5	20.3	18.5	19.9	18.2	22.7	22.1	24.9	19.2	20.1	21.0	17.9	12.9	9.5
Central bank policy rate (p.a.) ⁴⁾	% eop	10.0	9.5	9.5	9.5	9.0	8.5	8.0	8.0	8.5	9.0	9.5	10.5	11.5	11.5	12.0
Central bank policy rate (p.a.) ⁴⁾⁵⁾	real, %, eop	3.3	2.1	-1.3	-0.6	-2.8	-4.1	-4.0	-3.2	-3.2	-3.1	-4.5	-4.3	-3.4	-4.5	.
BUDGET																
Central gov.budget balance, cum.	RSD mn	-78296	-90457	-696	-15995	-20598	-30806	-40938	-48559	-56549	-59303	-71284	-85966	-82811	#####	-1195

- 1) From January 2009 including wages of employees working for entrepreneurs (physical persons).
- 2) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.
- 3) Excluding frozen foreign currency savings deposits of households.
- 4) Two-week repo rate.
- 5) Deflated with annual PPI.

Source: wiw Database incorporating national statistics.

R U S S I A: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010												2011
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
PRODUCTION																
Industry, total	real, CPPY	4.9	6.8	10.2	8.4	9.8	10.4	12.6	9.8	6.0	7.1	6.3	6.7	6.8	6.5	6.9
Industry, total	real, CAPPY	-10.7	-9.3	10.2	9.3	9.5	9.7	10.3	10.2	9.6	9.2	8.9	8.7	8.5	8.3	6.9
Industry, total	real, 3MMA	1.8	7.2	8.4	9.5	9.5	10.9	10.9	9.4	7.6	6.5	6.7	6.6	6.7	6.7	.
Construction, total	real, CPPY	-10.3	-3.1	-13.6	-12.8	-8.2	-5.5	-5.0	-0.3	-5.6	0.0	2.0	2.9	-1.0	11.6	-1.1
Construction, total	real, CAPPY	-14.9	-13.7	-13.6	-13.2	-11.5	-9.8	-8.8	-7.3	-7.0	-6.2	-5.3	-4.4	-4.1	-2.3	-1.1
LABOUR¹⁾																
Employed persons, LFS	th. pers., avg	69362	69246	67737	68030	68228	68851	70244	71006	70862	71236	71100	70481	70243	69621	.
Employed persons, LFS	CCPPY	.	-2.5	.	.	0.4	.	.	0.6	.	.	0.8	.	.	0.7	.
Unemployed persons, LFS	th. pers., avg	6162	6173	6832	6436	6418	6140	5553	5206	5357	5248	5032	5111	5014	5392	5709
Unemployment rate, LFS	%, avg	8.2	8.2	9.2	8.6	8.6	8.2	7.3	6.8	7.0	6.9	6.6	6.8	6.7	7.2	7.6
WAGES																
Total economy, gross	RUB	19215	24004	18938	19017	20589	20358	20279	21795	21325	20753	20999	20970	21486	28027	21861
Total economy, gross	real, CPPY	0.0	1.7	2.4	3.7	6.7	6.6	6.3	7.1	7.1	6.6	4.2	3.7	4.0	7.9	5.9
Total economy, gross	EUR	445	548	442	461	513	519	529	572	546	529	524	498	507	687	542
Industry, gross ²⁾	EUR	417	449	390	408	456	474	479	501	505	493	485	470	470	566	.
PRICES																
Consumer	PP	0.3	0.4	1.6	0.9	0.6	0.3	0.5	0.4	0.4	0.6	0.8	0.5	0.3	1.0	2.4
Consumer	CPPY	9.2	8.9	8.1	7.2	6.5	6.0	6.4	6.1	5.9	6.6	7.4	8.0	8.0	8.6	9.5
Consumer	CAPPY	12.1	11.8	8.1	7.6	7.2	6.9	6.8	6.7	6.6	6.6	6.7	6.8	6.9	7.1	9.5
Producer, in industry	PP	-0.5	0.5	-1.1	2.0	1.8	3.2	2.7	-3.1	0.6	3.3	-1.3	2.2	4.4	1.0	2.1
Producer, in industry	CPPY	4.7	13.9	16.6	13.1	11.9	12.8	15.2	9.2	7.9	10.0	7.3	10.7	16.1	16.7	20.5
Producer, in industry	CAPPY	-8.8	-7.2	16.6	14.8	13.8	13.6	13.9	13.1	12.3	12.0	11.4	11.4	11.8	12.2	20.5
FOREIGN TRADE																
Exports total, cumulated	EUR mn	191673	215006	19466	41895	66810	91742	116987	143125	166807	190581	215723	239679	264326	.	.
Imports total, cumulated	EUR mn	106656	119519	6779	17007	29704	42974	57302	72295	87255	104172	120668	136872	153303	.	.
Trade balance, cumulated	EUR mn	85016	95487	12687	24888	37105	48767	59685	70829	79553	86409	95055	102806	111023	.	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	35095	.	.	24571	.	.	39503	.	.	44176	.	.	54665	.
EXCHANGE RATE																
RUB/EUR, monthly average	nominal	43.183	43.817	42.824	41.271	40.131	39.227	38.345	38.115	39.090	39.220	40.109	42.101	42.405	40.789	40.352
RUB/USD, monthly average	nominal	28.985	29.941	31.946	30.225	29.565	29.198	30.358	31.169	30.687	30.344	30.836	30.321	30.968	30.854	30.085
EUR/RUB, calculated with CPI ³⁾	real, Jan07=100	100.8	99.4	103.8	108.3	111.2	113.6	116.6	117.8	115.5	115.6	113.7	108.5	107.9	112.6	116.6
EUR/RUB, calculated with PPI ³⁾	real, Jan07=100	98.9	98.0	98.3	103.7	107.8	112.9	118.1	114.8	112.4	116.6	112.1	108.9	112.6	117.2	120.9
USD/RUB, calculated with CPI ³⁾	real, Jan07=100	115.3	112.3	106.5	113.6	116.3	117.9	113.9	111.4	113.7	115.4	114.3	116.8	114.7	116.0	121.2
USD/RUB, calculated with PPI ³⁾	real, Jan07=100	109.3	105.9	96.1	104.2	107.0	111.2	109.6	104.1	106.1	110.4	107.1	110.3	112.1	112.5	116.9
DOMESTIC FINANCE																
Currency outside banks	RUB bn, eop	3600.1	4038.1	3873.3	3950.0	3986.1	4181.0	4240.3	4367.7	4467.3	4477.8	4524.5	4590.0	4621.5	5062.7	.
M1	RUB bn, eop	7459.8	8294.5	8013.9	8203.2	8339.5	8512.3	8771.7	9031.7	9034.7	9217.6	9417.8	9449.1	9727.1	10858.3	.
M2	RUB bn, eop	18142.5	19520.1	19229.6	19407.4	19652.8	20017.5	20446.9	20841.3	21037.3	21218.5	21537.8	21768.9	22382.6	23952.5	.
M2	CPPY, eop	17.6	16.4	17.4	18.4	20.5	22.4	23.4	22.2	22.3	22.0	22.9	23.7	23.4	22.7	.
Central bank policy rate (p.a.) ⁴⁾	%, eop	9.0	8.8	8.8	8.5	8.3	8.0	8.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Central bank policy rate (p.a.) ⁴⁾⁵⁾	real, %, eop	4.1	-4.5	-6.7	-4.1	-3.3	-4.3	-6.2	-1.3	-0.1	-2.1	0.4	-2.6	-7.2	-7.7	-10.6
BUDGET																
Central gov. budget balance, cum.	RUB bn	-1732.9	-2300.0	87.1	-169.5	-244.6	-412.2	-463.3	-388.3	-512.8	-623.2	-692.6	-759.9	-891.6	.	.

1) Survey results as of February, May, August and November, from August 2009 on a monthly basis.

2) Manufacturing industry only (D according to NACE Rev. 1).

3) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

4) Refinancing rate.

5) Deflated with annual PPI.

Source: wiw Database incorporating national statistics.

UKRAINE: Selected monthly data on the economic situation 2009 to 2011

(updated end of Feb 2011)

		2009		2010										2011		
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
PRODUCTION																
Industry, total	real, CPPY	8.6	7.2	12.9	6.1	14.4	17.6	13.0	9.4	6.8	9.8	10.5	10.6	10.6	13.3	9.6
Industry, total	real, CCPY	-23.9	-21.9	12.9	9.4	11.2	12.8	12.9	12.3	11.4	11.2	11.1	11.1	11.0	11.2	9.6
Industry, total	real, 3MMA	2.8	9.4	8.6	11.2	12.8	15.0	13.3	9.7	8.6	9.0	10.3	10.6	11.5	11.2	.
Construction, total	real, CCPY	-49.8	-48.2	-24.1	-20.9	-21.4	-21.2	-20.0	-19.3	-16.7	-14.0	-12.6	-9.0	-8.2	-5.4	6.1
LABOUR																
Employees total, registered ¹⁾	th. persons, avg	10451	10374	10740	10723	10738	10724	10693	10694	10685	10657	10713	10718	10673	10578	.
Employees in industry, registered ¹⁾	th. persons, avg	2779	2761	2850	2846	2847	2834	2825	2827	2827	2825	2828	2841	2836	2818	.
Unemployment, registered	th. persons, eop	512	532	527	530	505	455	419	399	397	396	408	401	450	545	586
Unemployment rate, registered	% eop	1.8	1.9	1.9	1.9	1.8	1.6	1.5	1.4	1.4	1.4	1.5	1.4	1.6	2.0	2.1
Labour productivity, industry ¹⁾	CCPY	-14.8	-12.6	17.6	13.6	15.1	16.3	15.9	14.8	13.6	13.0	12.6	12.2	11.8	11.8	.
Unit labour costs, exch.r. adj.(EUR) ¹⁾	CCPY	-15.6	-15.4	-9.7	-7.2	-6.0	-5.3	-2.1	1.5	4.5	6.7	9.0	10.3	11.6	13.4	.
WAGES ¹⁾																
Total economy, gross	UAH	1955	2233	1916	1955	2109	2107	2201	2373	2367	2280	2349	2322	2353	2629	.
Total economy, gross	real, CCPY	-5.6	-0.6	3.6	1.7	4.5	4.1	9.6	12.1	10.4	9.7	8.2	8.2	10.2	7.9	.
Total economy, gross	EUR	164	191	168	178	195	198	220	245	235	224	228	211	217	250	.
Industry, gross	EUR	188	192	193	203	232	234	250	266	267	260	264	248	253	285	.
PRICES																
Consumer	PP	1.1	0.9	1.8	1.9	0.9	-0.3	-0.6	-0.4	-0.2	1.2	2.9	0.5	0.3	0.8	1.0
Consumer	CCPY	13.6	12.3	11.1	11.5	11.0	9.7	8.5	6.9	6.8	8.3	10.5	10.1	9.2	9.1	8.2
Consumer	CCPY	16.3	15.9	11.1	11.3	11.2	10.8	10.3	9.8	9.3	9.2	9.3	9.4	9.4	9.4	8.2
Producer, in industry	PP	0.4	1.0	1.9	1.9	3.0	3.0	4.4	-0.5	-0.2	0.9	0.1	2.4	-0.3	0.9	1.3
Producer, in industry	CCPY	12.8	14.4	16.3	16.5	18.6	21.7	28.0	25.6	24.4	23.3	19.2	19.8	18.9	18.8	18.1
Producer, in industry	CCPY	5.9	6.6	16.3	16.4	17.2	18.3	20.2	21.1	21.6	21.8	21.5	21.3	21.1	20.9	18.1
FOREIGN TRADE																
Exports total (fob), cumulated	EUR mn	25622	28491	2110	4576	7467	10604	13903	17387	20691	23984	27548	30982	34756	38763	.
Imports total (cif), cumulated	EUR mn	29114	32609	2330	5045	8522	11974	15459	19280	23306	27508	31672	36162	40752	45779	.
Trade balance, cumulated	EUR mn	-3492	-4118	-220	-469	-1055	-1370	-1556	-1893	-2614	-3523	-4124	-5180	-5996	-7016	.
FOREIGN FINANCE																
Current account, cumulated	EUR mn	.	-1239	.	.	9	.	.	416	.	.	-240	.	.	-1890	.
EXCHANGE RATE																
UAH/EUR, monthly average	nominal	11.917	11.676	11.430	10.953	10.822	10.634	10.000	9.668	10.057	10.180	10.293	10.994	10.867	10.497	10.615
UAH/USD, monthly average	nominal	7.994	7.978	7.997	8.000	7.967	7.926	7.926	7.916	7.902	7.890	7.910	7.910	7.928	7.956	7.950
EUR/UAH, calculated with CPI ²⁾	real, Jan07=100	81.3	83.5	87.2	92.4	93.7	94.6	99.9	102.8	98.9	98.6	100.2	93.9	95.2	98.8	98.6
EUR/UAH, calculated with PPI ²⁾	real, Jan07=100	88.8	91.5	94.4	100.1	103.6	107.7	119.1	122.1	117.0	117.5	115.9	110.9	111.5	115.5	115.7
USD/UAH, calculated with CPI ²⁾	real, Jan07=100	93.1	94.3	95.4	97.2	98.1	98.1	97.4	97.2	97.2	98.3	100.8	101.2	101.3	101.5	102.1
USD/UAH, calculated with PPI ²⁾	real, Jan07=100	98.1	98.9	98.5	100.8	102.9	105.9	110.4	110.7	110.4	111.1	110.8	112.4	111.2	110.7	111.3
DOMESTIC FINANCE																
Currency outside banks	UAH bn, eop	147.9	157.0	153.1	154.0	155.1	159.9	162.1	168.3	175.1	175.1	174.8	175.2	173.3	183.0	.
M1	UAH bn, eop	220.7	233.7	227.0	227.6	235.5	242.8	249.2	259.5	269.3	271.3	275.4	277.7	276.4	289.9	.
Broad money	UAH bn, eop	470.4	487.3	479.9	480.4	494.2	510.8	521.4	533.5	550.9	556.2	568.8	576.0	574.1	597.9	.
Broad money	CCPY, eop	-2.8	-5.5	-2.6	2.0	6.6	9.8	11.3	12.9	16.8	18.1	21.2	23.0	22.0	22.7	.
Central bank policy rate (p.a.) ³⁾	% eop	10.3	10.3	10.3	10.3	10.3	10.3	10.3	9.5	8.5	7.8	7.8	7.8	7.8	7.8	7.8
Central bank policy rate (p.a.) ³⁾⁴⁾	real, % eop	-2.3	-3.6	-5.2	-5.3	-7.1	-9.4	-13.8	-12.8	-12.8	-12.6	-9.6	-10.0	-9.4	-9.3	-8.8
BUDGET																
General gov. budget balance, cum.	UAH mn	-15742	-37258	423	-2688	-4367	-1820	-11505	-24979	-25273	-39374	-47454	-51400	-46662	-64836	.

1) Excluding small firms.

2) Adjusted for domestic and foreign (US resp. EU) inflation. Values more than 100 mean real appreciation.

3) Discount rate.

4) Deflated with annual PPI.

Source: wiw Database incorporating national statistics.

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