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Market Competition in Transition Economies: A Literature Review

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A Literature Review

**Klaus S. Friesenbichler, Michael Böheim,
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Market competition in transition economies: A literature review

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Abstract

This paper provides a survey of the effects of market competition in the transition economies of Eastern Europe and Central Asia. The pivotal element of the transition was inter-firm competition, which replaced economic planning as the method to identify demand. Pro-competitive policies that facilitated the transition are discussed, including international trade, attracting foreign direct investment and firm entry. Research topics with respect to competition changed as the transition advanced. The focus shifted from churn and macroeconomic shock-management in the initial phases toward firm entry, privatisation and restructuring of incumbents. In the later phases of the transitions, differentials in aggregate economic performance became obvious, pointing at institutional differences and their interplay with transitions. These are equally reflected by the degree of competition of the business environment. Also the methods changed with the evolution of the research agenda. Early case studies were displaced by large-scale, cross-country econometric studies as survey data became increasingly available.

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Market competition in transition economies: A literature review

0. Introduction

In 1990, the Soviet Union followed the previous year's collapse of the communist regimes in Eastern Europe. These events marked the beginning of fundamental, systemic changes that transformed societies, economic structures, political systems and institutional arrangements. The perception of the transition is not restricted to overcoming backward economic structures, but also involved attributes of the social system like freedom of speech and democracy. The focus of this paper is on the economic transition that describes how economic planning was replaced by market economies in which prices are set by the interaction between buyers and sellers. Especially in the initial years, the transition countries struggled with macro-economic stability, and challenges remain to date. The re-allocation of resources and the structural change occurred fast, and the newly arising economic base could not accommodate a labour force whose skills did not match the labour demand. Unemployment rates increased and persistently stayed at high levels, entering the official statistics of countries that used to claim full employment. This already exemplifies that the transition confronted policy makers with substantial challenges. Policy makers had little experience in macroeconomic management. In addition, governance capacities were typically poor.

The initial phase brought a series of considerable economic shocks in almost all countries that lasted for several years until macroeconomic stability was achieved, often by currency reforms after periods of hyperinflation. By the mid 1990s, the private sector made for an average of 40% of the transition economies' GDP (Hare and Turley, 2013), reflecting fundamental changes in the microeconomy (Commander et al., 1999). New firms exerted competition on formerly closed markets, expediting the structural change. Not only domestic firms entered the markets, but also liberal trade policies allowed for international competition and further increased the degree of competition. Government-owned firms were privatised as a reaction to reform pressures. Some of the most inefficient firms closed down. This did not occur uniformly across the formerly planned economies. The transition countries differ in both speed and extent to which they implemented transition policies. While the 'shock therapy' approach sought an immediate and rapid change to a market economy, the 'gradualist model' aimed at generating an evolutionary process in which institutions and production

structures could follow a stepwise adjustment process. Then again, policy makers in some countries largely refrained from implementing transition policies.

The aim of this paper is to survey economic studies about the role of inter-firm competition and competition policies in transition economies. What effects did competition induce? What policies were implemented to facilitate transition processes? What policies can be regarded as successful and what as failure? What is the relationship between competition, productivity and innovation? The geographical focus is on the countries in Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) that formed the Soviet Union. The review is based on a search strategy that uses Econlit and its strict quality criteria as its main source. Furthermore, publications by international institutions such as development banks and Google Scholar were used as complementary sources to reduce the academic publication bias. A total of 28 core articles were identified, of which a summary is provided in the Annex.

This survey is written 25 years after the transition began, which allows covering a sufficiently long period to study the multilayered effects of competition. The experiences can be broadly structured into two phases. Most countries underwent an initial period of macro-economic disruptions and adjustments. In a second phase, a new firm base emerged that was capable to generate economic growth. Economic research questions changed accordingly. The focus shifted from 'shock-management' in which job-destruction dominated job-creation to the promotion of the private sector via entry and competition. While earlier articles examined competition and productivity, later research tends to analyse the effects of market competition on technology and innovation. As the transition advanced and entrepreneurial activities gained in complexity, cross-country variance in aggregate performance became obvious tilting the research agenda toward institutional economics. Since the transition process has been completed, research on the transition process itself ceased, and economic literature about the former transition countries has become part of development economics. Also the methods used changed. Earlier papers typically presented case studies of selected countries. Later articles provide international comparisons using large-scale survey data. Commonly used data are the Business Environment and Enterprise Performance Surveys fielded by European Bank for Reconstruction and Development and the World Bank.

The remainder is divided into three sections. First, the stage is set by a series of stylised macro-economic findings about the transition process. Secondly, the economic effects of market

competition on economic structures, productivity and innovation are sketched. Third, evidence about pro-competitive policies innate to the transition processes is presented.

1. Macroeconomic patterns

Economic transition describes the process to switch from economic planning to a market based allocation. The transition process is the transformation of political and economic systems, and is related to social changes that are induced by the switch from economic planning to a market-economy (Fingleton et al., 1996). From an economic perspective, the objective of the transition was to remove the shortcomings of economic planning, including its anti-consumer bias, over-industrialisation, the manufacturing sector's low productivity and the economy-wide inward orientation. The communist economies were largely closed, and provided only a reduced variety of goods. Moreover, the goods provided were allocated in a way that inadequately reflected consumers' preferences (Kornai, 1992a, 1992b; Havrylshyn, 2013).

The type of economic planning differed across transition economies. The transition economies departed from different systems. In all countries analysed economic planning relied on indicator sets that sought to capture consumer preferences. The allocation process was conducted by a public organisation whose decisions were superseding individual preferences. Yet, this occurred to a varying degree. The most extensive form of economic planning is a centrally steered allocation system in which a committee of experts takes the majority of economic decisions in a top-down fashion. Their responsibility covers the allocation of means of production, resources and investments. Central planning was for example implemented in the Soviet Union. More moderate forms involved decentralised, bottom-up planning elements that considered individual preferences to a certain degree, for instance by co-operatives and collective decision making platforms. This was for example implemented in former Yugoslavia.

The transitions from economic planning to a market economy posed a natural experiment that allowed studying the impact of the introduction of competition. To social research, the change in systems offered a hitherto unique possibility to analyse important policy-related questions. Some authors called the wave of transitions a large scale natural experiment, because many countries went through the transition process simultaneously, which provided

control groups (Carlin et al., 2004). As with all natural experiments, certain doubts about the identification of single effects however remain.

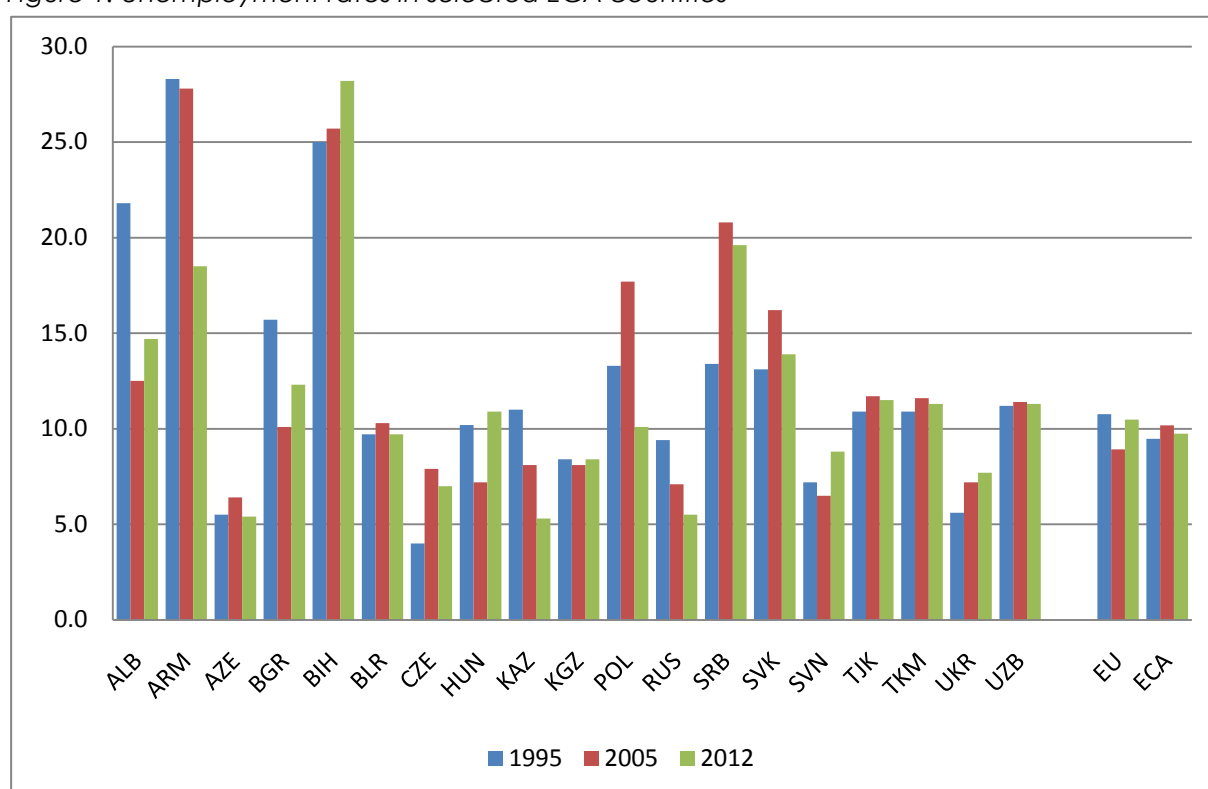
Liberalisation and market-oriented instruments dominated the policy agenda. The country-specific transition processes were accompanied, sometimes guided by the advice of international organisations. Especially the International Monetary Fund and the World Bank have recommended a policy mix which aimed at facilitating the systemic change. The recommended policies included liberalising economic activity, prices, and market operations with the aim of reallocating resources to their most efficient use. Macro-economic stability was thought to be best achieved by indirect, market-oriented instruments (Havrylyshyn and Wolf, 1999; Hare and Turley, 2013). Free entrepreneurship was a cornerstone of a more efficient allocation system. More effective enterprise management in incumbents was often achieved by privatisations and the imposition of budget constraints to incentivise efficiency enhancing firm restructuring. Markets were opened to both national and international competition, and firm exit was facilitated (e.g., Commander et al. 1999). The advice for specific policies was accompanied by the establishment of an institutional and legal framework that secured property rights, the rule of law and transparent market-entry regulations (Havrylyshyn and Wolf, 1999; Hare and Turley, 2013). In addition, the prospect of EU accession has encouraged many transition countries to open and deregulate their markets and divest state-owned assets (Dutz and Vagliasindi, 2000b).

Economic performance improved after substantial macroeconomic adjustment costs were incurred. The implementation of the efficiency-enhancing policy mix caused substantial macro-economic adjustment costs, which however was the precondition for economic growth in later periods. Once the initial stern impact was absorbed, economic recovery could occur in a second stage (Hare and Turley, 2013). For instance, Turley (2013) sketches the macroeconomic patterns of these adjustment processes. In the first decade after the transition there was a rise in the contribution of the private sector to total GDP. This also implied an increase in consumption. The structural breaks led to substantially higher unemployment rates (see Figure 1), and both government revenues and trade volumes were in decline. Many transition economies faced harsh recessions in the 1990s, accompanied by the exit of inefficient incumbents. Once these shocks were absorbed, a second phase began in which many economies recovered. In those countries that pursued open trade policies, foreign trade and direct investment increased, and FDI led to technology spillovers from foreign firms. However, there is a substantial and persistent degree of cross-country variance

in both extent and pace of policy reform, determining the country-specific patterns of these rather distinct phases.

Crises serve as a catalyst for reforms. The 'crises beget reform' hypothesis put forward by Alesina and Drazen (1991) suggests that crisis can have a favourable effect accelerating economic reform. A history of having experienced a crisis in the past can be associated with greater economic reform dynamics and better institutions, even though institutional improvements tends to occur with delay. Crises translate into better economic performance, since they are followed by higher growth, lower inflation and, with a delay, higher investment (Fidrmuc and Tichit, 2012).

Figure 1: Unemployment rates in selected ECA countries



Source: WBI (ILO; Key Indicators of the Labour Market database), own illustration

Note: Unemployment refers to the share of the labour force that is without work but available for and seeking employment.

CEE countries have largely completed the economic transition process. Structural adjustments in CIS countries were less pronounced. There is considerable cross-country variance in policy makers' strides toward a private sector based economic system. This raises

the question if the transition process has been completed in some countries. From an institutional perspective, the transition comprises two partly overlapping phases. First, the change of rules that allows for a market-based allocation system. There is cross-country variance in the implementation of this step. The Central European and the Baltic countries have completed this first step between 1992 and 1994. Some transition countries implemented changes in the legal structures slowly (e.g., Romania or Bulgaria) and perhaps hesitantly (e.g., Russia). Some countries have hardly initiated any systemic changes (e.g., Uzbekistan). Second, the economies experienced 'structural corrections', which do not come without frictions (e.g., on the labour market) and societal challenges. Wide parts of Central Europe seem to have completed the transition process; many CIS countries are advancing; a few countries have stalled in their development (Havrylshyn, 2013).

Market competition reflects a functioning institutional quality. CIS countries are lagging. The main driver of transition has been more choice on the product market, reflecting an increase in market competition and a more equal split of market volumes among suppliers. There is continuing evidence of significant market power, especially in CIS countries. Part of this is due to geographic factors and the importance of regional markets, part is due to the unwillingness of foreign firms to enter, and part is due to the unwillingness or inability of governments to remove remaining publicly imposed entry and expansion barriers. This has restricted competition and limited the ability of the private sector to flourish (Commander, 1999; Havrylshyn, 2013).

Formal and informal institutions remain underdeveloped. Both extent and the speed at which transitions occur depend on the formal and informal institutions. Formal institutions have often shown to be weak, a characteristic that transition economies share with other developing countries. Most countries established two types of important formal institutions needed for a well-functioning market economy - the protection of private property rights and the protection and execution of business contracts. Both were not required in a planned economy, but are necessary conditions for the functioning of markets. The establishment of formal institutions happened rather late in the transition process. 25 years after the systemic change began most transition economies are still challenged due their underdeveloped formal institutions, which transcends to poor informal institutions. For instance, an effective and impartial judiciary is often lacking, which results in little confidence into the rule of law, also affecting the trust in economic policies (Hare and Turley, 2013). Moreover, such distrust also affects formal institutions, because formal and informal institutions are interlinked. Poor

informal institutions such as social distrust are positively associated with demand for regulation. However, the relationship between social trust and attitudes toward government intervention is conditional on individual confidence in state actors and in companies (Pitlik and Kouba, 2014).

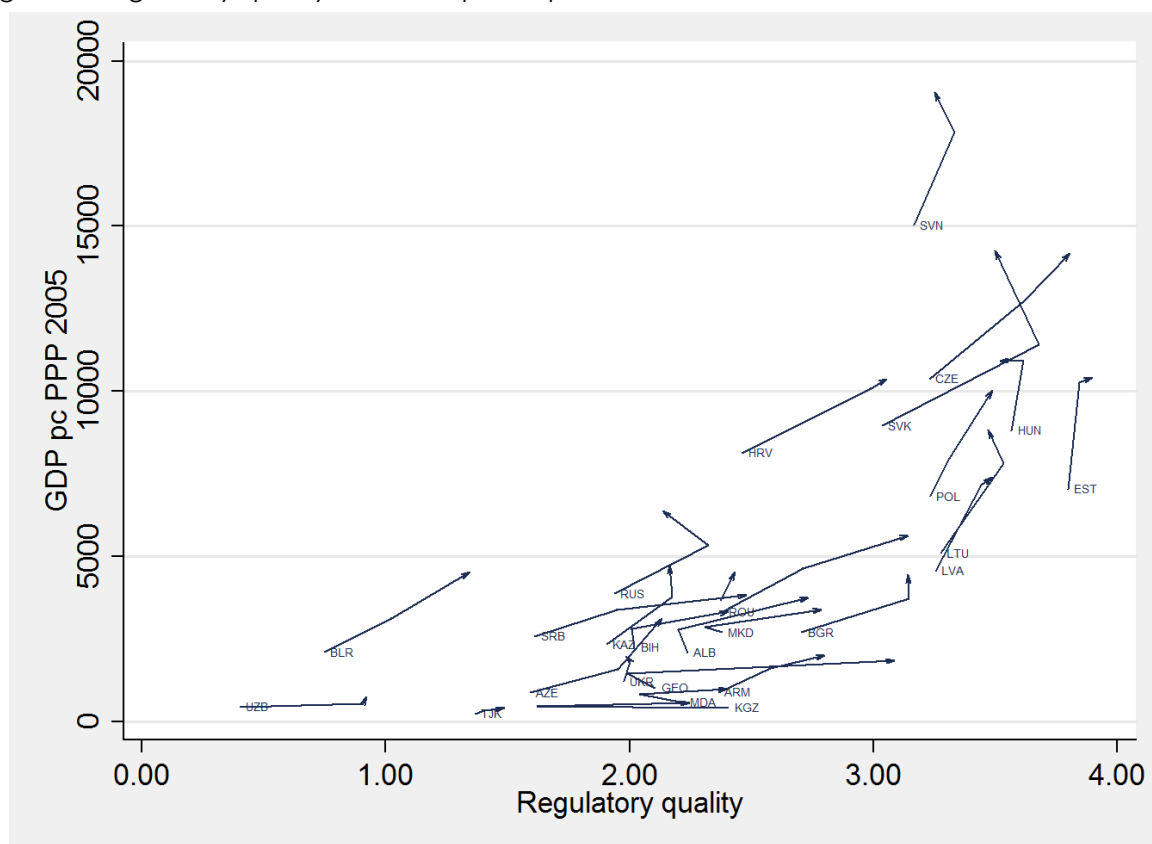
Social networks and political unwillingness to adjust regulations hamper transition processes.

Inclusive institutions secure property rights, law and order, market efficiency and provide fair state support to markets via effective public services and impartial regulation. They are open to the free entry of businesses and support contractual security. On a more general level, they provide access to education and opportunity for the great majority of citizens insofar that they create incentives for investment and innovation, facilitating an entrepreneurial culture. In such an environment, competition occurs on a level playing field. On the contrary, extractive economic institutions have been designed by the politically powerful elites to extract resources from the rest of society (Acemoglu and Robinson, 2006). This dichotomy is reflected by advances in the transition process insofar that countries that have completed transitions have more inclusive institutions than countries that have not. Extractive institutions show higher levels of corruption, and social networks tend to generate insider-outsider problems that undermine the business climate of transition economies (Almanzar, 2010; Hare and Turley, 2013).

Economic planning led to inefficient sector structures, lacking industrial dynamism and poor economic growth.

Economic planning focussed on the manufacturing and agricultural sector. The service sector was relatively underdeveloped, and the manufacturing sector was dominated by large, yet highly unproductive firms. These inefficiencies of the former economy can be explained by the market structures, in which few large, typically vertically integrated firms had to fulfil their quotas in relative absence of alternative suppliers (Estrin et.al., 2006). Path dependence partly explains the low shares of the service industries that are perceivable to date. The market structures generated an economy in which innovation and industrial dynamism was largely lacking, leading to supply side inefficiencies and a poor economic growth performance. Firm dynamism was further hampered by credit market restriction. Non-financial entry barriers were prohibitively high. The inward orientation of production led to smaller, less lucrative markets or market segments. As a result, economies of scale and scope suffered, which further lowered firms' performance (Carlin, 2004). With the emergence of a regulatory level-playing field for firms GDP per capita increased, too (see Figure 2).

Figure 2: Regulatory quality and GDP per capita in 2000, 2005 and 2010



Source: AMECO, Worldwide Governance Indicators, own illustration.

Note: Regulatory quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. (<http://info.worldbank.org/governance/wgi/index.aspx?fileName=ge.pdf#doc-methodology>).

2. Creative destruction and innovation

Economic transition implies replacing economic planning by a market competition based allocation system. Transition economies departed from the abandonment of economic planning, the alternative hypothesis to competitive allocation, i.e. opening markets to inter-firm competition. The relationship between competition and transition is therefore not unidirectional, “[.] competition in the product market is one of the very fundamental forces driving the transition process, as well as being caused by it” (cit. Fingleton et al., 1996, p.12). The concept of inter-firm competition gradually loses its importance in more interventionist, state driven approaches, such as Post-Keynesian or Neo-Marxist policies.

Inter-firm competition is a key element of a market based economy. The quota systems of economic planning not only restricted product quantities, but also failed revealing consumer

preferences. The fundamental difference between economic planning and market economies is the difference in the identification channel of demand. While demand is satisfied in a top-down fashion in economic planning, market based economies use competitive allocation mechanisms. The Merriam-Webster dictionary defines competition as *“the effort of two or more parties acting independently to secure the business of a third party by offering the most favorable terms”*.¹ In competitive economic systems, firms are the key agents that compete on markets with varying prices and qualities. Competition generates prices that, given the cost structures of producers, reveal consumers' willingness to pay and therefore communicate consumer preferences. Market competition is therefore a key instrument in lifting the perceived 'anti-consumerism' of planned economies.

Market competition reduces prices, drives inefficient firms out of the market and is associated with innovation.

Neoclassical economics ascribes two effects to competition. First, it drives down prices and statically optimises allocation, because entrepreneurs are not able to make any profits above the 'normal' rate of return. . Prices converge to marginal costs of production. Second, it induces a dynamic process in which firms change their technology base (e.g., Arrow, 1962). In particular dynamic competition is a driver of industrial dynamism, where firm turnover increases as firms enter the market and displace inefficient firms (firm turnover is defined as the entry plus exit rates). The vehicle for this creative destruction process is the appearance of new technologies (Schumpeter, 1942), which is associated with more efficient firms, as well as the emergence of new markets. Market competition can therefore be interpreted as a "search and discovery process" (Hayek, 1968) for new products. The emergence of a new technology base may create new markets, and thereby constitute structural change beyond within-industry adjustments. Since the catching-up process of transition economies required an upgrading of the technological base and the emergence of firms that better satisfy consumer demand, creative destruction was particularly pronounced in the initial years.

Hampering creative destruction comes at macroeconomic cost. Empirical findings and models coincide in their conclusion that creative destruction is an integral part of economic growth and fluctuations. Obstacles to the creative destruction process may have severe short- and long-run consequences on macroeconomic performance (Caballero and Hammour, 1994, 1998).

¹ See <http://www.merriam-webster.com/dictionary/competition> (retrieved on 7 May 2014).

Firm dynamism was large in the beginning of the transition reflecting intense structural change in the firm demography. This process slowed down at the end of the 1990s. At the beginning of the transition, gross and net firm flows were large compared to industrial and other emerging economies. This mirrors the initial shock in which a large fraction of firms were closed down and replaced by new small firms. The firms affected accounted for more than 10% of total employment. As the transition moved forward gross and especially net firm flows declined, and by the end of the 1990s reached rates that are observable in other countries. Transition economies and developing countries in general have a larger churn rate than industrial countries (Bartelsman et al., 2004).

Firm entry led to the emergence of small firms. Transition countries have encouraged market competition by promoting the entry of new and productive firms and the exit of old, less productive state-owned enterprises (Kornai, 1992a). New firms substantially differed from most of the existing firms that were inherited from the period of economic planning. The net entry of firms (entry rate minus exit rate) was particularly large amongst micro firms with twenty or fewer employees. This size class was diminishingly small in the initial industry firm demography (Bartelsman et al., 2004).

Firm entry was the driver of productivity growth. New firms initially enjoyed a time of low market contestability, which diminished in later phases. In the 1990s, total firm turnover ranged between three and eight percent in most industrial countries and more than ten percent in some of the transition economies. Firm entry outpaced firm exit if compared to other countries which displayed a more balanced pattern. Productivity growth was largely driven by new firms. A very high rate of firm turnover as a share of total employment and entry accounts for a large share of productivity growth, which however is less than proportionate to the share of firm turnover. This reflects high churn rates in transition economies. Firm survival rates and post entry growth of successful firms are higher in transition economies than in other countries. This seems to confirm the hypothesis that new firms enjoyed a period of relatively low market contestability especially in new low populated markets. However market forces have quickly strengthened after the first decade. Entry and exit rates have stabilised. Failure rates among new firms have increased, reflecting established markets and functioning market forces (Bartelsman et al., 2004).

There is cross country variance in the effectiveness of creative destruction processes. There are also interesting differences across countries. Hungary as well as some small open economies in transition (Estonia, Latvia and Slovenia) have all experienced a strong creative

destruction process, with large post entry growth and a marked contribution of the new entry (as well as exit) to productivity growth. Romania was long dominated by large firms; entry of new firms has increased rapidly in the early 2000s when market reforms were brought forward, but successful new firms struggled expanding their operations (Bartelsman et al., 2004). The extent to which the former communist economies undertook reforms and private entrepreneurial activities before the transition has influenced these countries' subsequent restructuring and growth paths (Münich and Svejnar, 2007).

There is a possible trade-off between static and dynamic effects of competition. The optimal degree of competition is unclear. The trade-off between static and dynamic effects concerns consumers, who on the one hand prefer low prices levels requiring high levels of competition, and on the other hand seek the best technologies and qualities, whose provision is not necessarily the result of fierce price competition. This leads to the question about the optimal degree of competition, which remains disputed theoretically and empirically (Kovacic 2001). If competition becomes too fierce it may erode a firm's resources which are required for innovation. Hence, there seems to be an intermediate level of competition which induces an optimal degree of innovation. Analysing firm level efficiency conjectures, Ferrier et al. (1998) find that good static performance does not necessarily imply good dynamic performance.

Evidence for an inverted-U relationship between innovation and competition is mixed. Aghion et al. (2005) proposed the relationship between innovation intensity and competition to be an inverse U. The relationship has been frequently tested, but the results are non-conclusive and vary vastly. While decision-theoretic models that provide the starting point produce results which are consistent with the idea of an inverted-U relationship, game theoretic models deliver mixed results, depending on the specific modelling approach (De Bondt and Vandekerckhove, 2012). Empirical results generally support the hypothesis of a non-monotonic relationship (Peneder, 2011), even though the findings about the explicit inverted-U form remain ambiguous. Gorodnichenko et al. (2010) do not find evidence for an inverted U relationship between innovation and competition. Carlin et al. (2004) however find weak support for an inverted U relationship. While there is evidence that monopolies innovate less than firms under competition, the presence of a few rivals is more conducive to performance than the presence of many competitors.

Competition with foreign firms and the implementation of competition policies spurs innovation. Gorodnichenko et al. (2010) estimate the effects of foreign competition and

linkages with foreign firms on innovation by domestic firms. They find a positive relationship between foreign competition and a broad definition of innovation. The supply chain of multinational enterprises and trade are also important channels. The restructuring of the product portfolio and the introduction of new products are important determinants of sales growth, which again is driven by foreign competition and foreign demand for new products (Carlin et al. 2001). Stricter competition laws increase the likelihood of the introduction of new products, but decreases the likelihood of new production processes (Clarke 2011).

The improvements in the investment climate fostered innovation and productivity. The general investment climate is a crucial factor for technology adoption (Correa et al., 2010). Improvements in the formal institutions are conducive to performance. For instance, competition law interacts with innovation through two channels. It can increase domestic price competition and the pressure from foreign enterprises on domestic firms to innovate (Clarke, 2011).

The distance to the technological frontier may interact with competition policies. Aghion et al. (2005) argue that proximity to the world technology frontier determines the importance of innovations relative to imitation for productivity growth. Empirical results confirm their hypothesis that for economies closer to the frontier R&D and innovation are more important and barriers to entry have a stronger negative effect on growth. The farther away a country is from the technological frontier, the more important an investment-based strategy consisting of long-term relationships, high average firm size and age becomes. Economies switch from an investment-based, Bertrand competition to an innovation-based, Cournot competition. Infant industry policies may prevent a premature switch, which however comes at the risk of a non-convergence trap, where the economy is trapped in the investment-based strategy and does not converge to the frontier. Accordingly, the switch may be too late if incumbents try to shield themselves from competition. This model is not supported by Gorodnichenko et al. (2010) who find that the relationship between globalization and innovation does not vary across the manufacturing and service sectors or with the distance to the technological frontier. The imitation hypothesis is supported by Correa et al. (2010), who find that countries that acceded to the European Union in 2004 exhibit higher levels of technology adoption given their better governance than other transition economies.

3. Policies facilitating the transition to competitive allocation

Pro-competitive policies sought to support the transition process and the structural change.

Facilitating the transition, economic policy makers have implemented a market competition based policy mix. Ample research has been conducted covering a wide range of topics (e.g., Commader et al. 1999; Dutz and Vagliasindi, 2000a, 2000b; Vagliasindi, 2001; Bartelsman et al., 2004; Djankov and Murrell, 2002; Kovacic, 2008; Hare and Turley, 2013), which leads to the following grouping of policies:

- Restructuring of incumbent firms
- Domestic firm entry
- Openness to international trade and foreign ownership
- Anti-trust and pro-competitive measures such as antitrust laws

3.1 Restructuring of incumbent firms

There are two types of firms - “old” incumbents and “new” entrants. Some firms exited, while competition for remaining incumbents intensified. The initial transition phase quickly introduced a two-tier performance pattern. Competitive new firms compete against less efficient, but well positioned incumbents with poor governance structures and outdated technologies. Policy makers are confronted with different patterns and diverse firm characteristics (e.g., Aghion et al., 2005). Some of the formerly state owned enterprises had to close, while competition incentivised managers of remaining incumbents to seize efficiency potentials and change their technological base. The bulk of innovation and productivity gains was driven by new firms (Carlin et al., 2004). Firms that remained in state-ownership are less efficient and engage less in product innovation (Carlin et al. 2001; Corraa et al. 2010).

Incentives for managers of pre-transition firms to operate plants efficiently were lacking. The pre-transition enterprises were state-owned, vertically integrated, protected from competition, shielded from failure by soft budgets and managed by production engineers with incentives oriented toward the plan or politics (Kornai, 1992b; Djankov and Murrell, 2002). The system created production structures in which product differentiation hardly occurred, and the service sector struggled to emerge. Standardized, tangible outputs and complex technological processes were often lacking (Fingleton et al., 1996). Plant managers' main incentive was to continue production and meet their quotas despite increasingly emerging

inefficiencies. They had no incentives to run plants efficiently, or to launch new products or processes (Carlin et al. 2004).

Transition policies fundamentally changed the incentive structures. The incentives for surviving companies changed due to the introduction of market competition, which was accompanied by complementary measures affecting the operations of incumbents. Such policies included the hardening the budget constraints (i.e., the withdrawal of subsidies and state support), the enforcement of bankruptcy procedures, and ownership changes, i.e. privatisations (Commander et al., 1999; Estrin, 2002). Single measures alone were not able to significantly improve performance of firms owned by the state (Frydman et al., 2000). New firms provided competitive discipline for incumbent firms in transition economies, and were more likely to have undergone restructuring if they faced competition (Carlin et al., 2001; Djankov and Murrell, 2002; Mcmillan and Woodruff, 2002).

The transition affected the wage structure. Evidence from the Czech Republic finds that the communist wage grid had extremely low and constant rates of return to education. The returns increased substantially in the transition, regardless of the firm ownership. This led to inter-industry differences in the wage structure. A decomposition of the variance of wages finds individuals' unobservable effects from communism to persist into transition, but most of the variance is due to unobservable effects introduced in the transition (Münich et al., 2005).

Evidence about the effects of privatisation on firm performance is mixed. Privatisation seems to have improved firm performance in the long run. Its impact on aggregate performance was higher if it was coupled with pro-competitive policies. Privatisation played a central role in the transition, even if the expected restructuring of enterprises, increases in firm performance and the enhancement of corporate governance systems did not occur as anticipated in the early phases (Vagliasindi, 2001). A positive effect of privatisation on firm performance has been empirically shown, but rather in the medium to long run and contingent on the initial market conditions and institutional structure (Estrin, 2002). To cause private sector growth in transition economies, privatisations required complementing pro-competitive policies that overcome entry barriers and other disadvantages for entrants. This makes a case for measures and policies ensuring rivalry to accompany successful transition processes (Fingleton et al., 1996). Stand-alone privatisation policies have been found to perform relatively poorer at increasing the degree of competition and enhancing long-run aggregate economic performance (Vagliasindi, 2001).

Post-privatisation success was greater in firms owned by profit oriented agents. In addition, the post-privatisation firm-performance is dependent on the new ownership structure. Firm performance after privatisation was greater in firms owned by investment funds, banks, foreign individuals and block holders than in firms owned by workers, managers or diffused individuals (Djankov and Murrell, 2002).

Firms are affected asymmetrically by economic policies. The political economy tends to favour incumbents to the disadvantage of new firms. The market structures that have arisen after the transition are not a level playing field. Large firms, especially incumbents benefit disproportionately from tax breaks or protectionist trade regimes. The political economy is also tilted towards size. Anti-trust laws are supposed to offset some of the disadvantages that smaller firms face, but are a relatively complex legal matter. The public administrations typically have poor governance capacities, which hamper the implementation of anti-trust laws. In addition, especially incumbents may influence policy makers in an environment lacking external control. While these issues are also present in developed countries, they are more pronounced in developing economies (Tybout, 2000). Empirical evidence shows that newly founded firms perceive a greater intensity of competition with respect to the reference category of privatised and state-owned enterprises. The latter are protected due to implicit and explicit subsidy policies tilting the playing field against de novo firms. Statistical evidence shows that this also holds for firm age and size (Vagliasindi, 2001; Mcmillan and Woodruff, 2002).

Efficiency improvements in incumbent firms were more effective in the CEE economies than in the CIS countries. The transformation policies were expected to cause a high exit rate of inefficient incumbents, and the growth of more efficient entrants. Economic activity was assumed to shift to more profitable firms. While these transformations eventually occurred in all countries, the observed effects were rather limited in some. In many countries the privatisation and restructuring of loss-making state owned enterprises was long delayed due to vested interests and the political economy. This changed only slowly and not uniformly across transition economies. An extensive survey by Djankov and Murrell (2002) finds that the effect of privatisation in the CEE economies has been much greater than in the CIS countries.

3.2 Domestic firm entry

Entering firms filled empty market segments in the initial period, but firm dynamism differs across countries. Firm entry was a key component of the transition. For instance, data by the

Polish Central Statistical Office shows that entry in Poland made a major contribution to industrial employment in the private sector, which increased from 15% in 1991 to 37% in 1994. Privatised firms represented only 6% of industrial employment in 1994, while new firms made for a sixth of industrial employment in 1993. In addition, the service sector grew from 40% of non-agricultural GDP in 1989 to 66% of GDP in 1997 (Konings et al. 1996, McMillan and Woodruff, 2002). Firm dynamism in Russia was more moderate, perhaps due to the context of a shrinking economy. The non-agricultural service sector increased from 40% of GDP in 1989 to 62% in 1997, even though service output declined by approximately 1% per year during the 1990s. The decline of manufacturing was even larger. In 1994, only 6% of manufacturing employment was in new firms in 1994 (Richter and Shaffer, 1996; McMillan and Woodruff, 2002). These differences are mirrored by the employment contribution of small firms as a proxy for start-ups. In Poland, 24% manufacturing employment was in small firms and only 10% in Russia (McMillan and Woodruff, 2002).

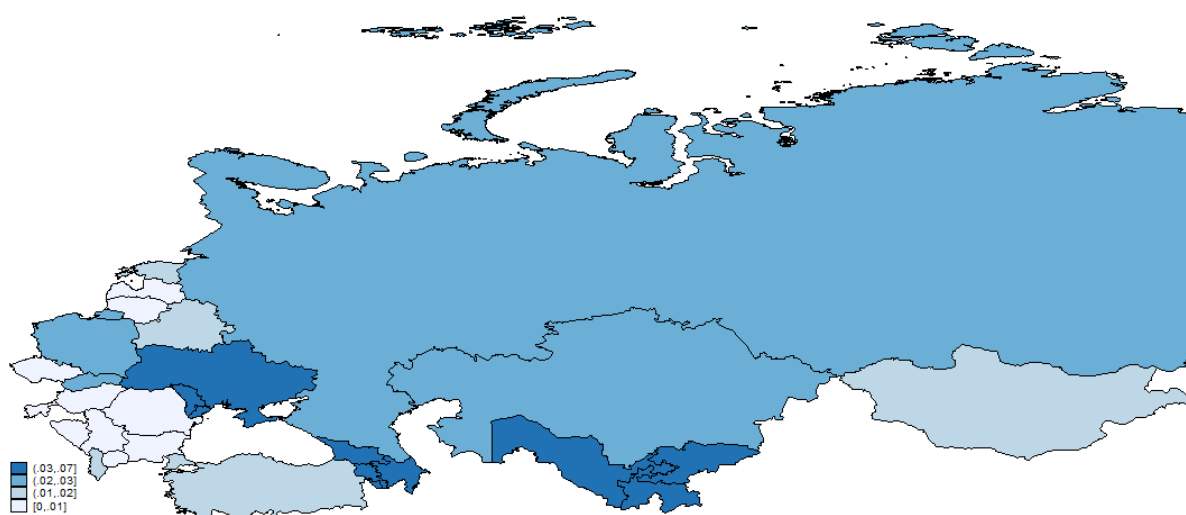
Profitability rates fell as entrepreneurial opportunities decreased and competition increased in later phases of the transition. The point of departure was a heavily distorted economy with unfilled market niches. Firms that were able to produce and sell goods and services despite the poor business environment quickly turned into profitable enterprises. Market niches were increasingly filled as the transition advanced, and profit rates fell with the rise in competition in then established markets (McMillan and Woodruff, 2002). Similarly, the degree of competition was higher the higher the perceived elasticity of demand (Vagliasindi, 2001).

Long run development of the private sector was more successful where the state did not fully withdraw. In the initial phases of the transition, performance improvements occurred fast in those countries where market activities were established more quickly than in others. However, medium to long-run performance improvements were more pronounced in the countries where the state did not completely withdraw. For instance, new firms entered and grew more slowly in Russia, where the government abruptly ceased controlling prices and rapidly privatised state-owned firms. Poland's growth performance was relatively better, probably due to a more gradualist approach (McMillan and Woodruff, 2002).

Market concentration and barriers to entry remain high. Albeit entry intensified competition and increased product variety transition economies remain characterized by highly concentrated markets, high level of state control, entry barriers and other forms of rigidities

due to the inherited market structure. Administrative barriers and subsidies to inefficient firms remain common, posing elements of anti-competitive behaviour (Vagliasindi 2001).

Figure 3: Percentage of surveyed firms that reported no competitors



Source: BEEPS data (2007, 2009).

Note: Albania and Croatia values for 2007. Due to the availability of map templates from Eurostat, the presently depicted area of Serbia includes the Kosovo (0.4%), Montenegro (1.8%) and Serbia (0.5%). The value used in the map was computed as the weighted average by the number of total observations in the country samples.

Formal and informal institutions may pose entry barriers. Facilitating entry increases the number of more efficient new firms, since reductions in the barriers to entry encourage the creation of new enterprises. Entrepreneurship was uncommon and mostly outlawed in central planned economies. Important drivers for the creation of new firms are formal and informal institutions, which are usually weak in transition countries. Therefore, important measures encouraging entrepreneurship include strengthening of institutions and reducing legal burdens on and restrictions for entry (Estrin and Mickiewicz, 2013).

Lowering entry and exit barriers and improvements in the investment climate have facilitated entry. There are statistically significant, positive relationships between the intensity of competition and lower barriers to entry and exit (see for example Vagliasindi, 2001). Facilitating both the entry of new firms and the exit inefficient firms was a key component of transition policies, supporting the structural change, which in turn has impeded monopolisation and collusion.

Well functioning complementary factor markets facilitate firm entry. Factors that hamper entry include inefficiencies in the credit market and unnecessary high levels of various cost types. A prerequisite for entrepreneurship is the access to funds. Nature and weak performance of capital markets in transition economies cause difficulties for new firms, as outsiders, to get funds to invest. Therefore, improvement in this area again facilitates entry and thereby enhances domestic competition. Furthermore, infrastructure investments, including physical infrastructure, reduce search and transportation costs (Aghion and Schankerman, 2000). Excessive regulation of both factor and product markets remain obstacles for entry in many CIS countries, and overregulation has also been documented in CEE countries (Vagliasindi, 2001).

Ineffective and inefficient public administrations have adverse effects on firm level indicators. Costs and uncertainty in the interaction with public administration create barriers to entry and has a negative effect on competition. Especially transition economies exhibit an inefficient quality of institutions, and further uncertainty comes from corruption. Furthermore, it reduces incentives to innovate thereby diminishing technical efficiency of new firms and incumbents alike (Pitlik et al., 2012).

3.3 Openness to trade and foreign direct investment.

Foreign direct investment was a key driver of the transition. Foreign direct investment was a key driver of the transition, in terms of fostering accelerated growth, technical innovation and enterprise restructuring. Countries that are excluded from the EU, typically because of poor progress in transition, receive lower levels of FDI, which will further limit their relative transition progress (Bevan and Estrin, 2000). Especially the synergy between FDI and human capital, rather than FDI itself, acts as a stimulant to growth (Aleksynska et al., 2003).

Openness to trade increased competition at the firm level. Closed markets are characterised by lacking competitive pressure from foreign firms, negatively affecting the performance of domestic firms. In addition to the closed markets, import substitution policies were pursued that created further inefficiencies. The opening of markets to international trade with multinational enterprises was a key policy measures in the beginning of the transition. International trade has proven to be the pivotal driver of the transition, even though the import-export ratio declined in the initial phase when the former trading alliances collapsed. Trade not only increases the market size and product variety, but is also tightly linked to competition, especially via imports. Empirical evidence confirms that markets that exhibit

high levels of openness also experience higher foreign competitive pressure at the firm level (Clarke, 2011). Foreign enterprises exercise pressure on domestic firms not only by increasing the number of competitors, but also by exploiting higher levels of efficiency through economies of scale and scope. This implies a better allocation of productive resources, lower prices and a better identification of demand.

Internationally competing firms are more innovative and efficient. Foreign owned firms are the main channel for knowledge spillovers. Ferrier et al. (1998) find that participation in international markets pressures domestic firms to be more efficient (via technology adoption/innovation), and possibly enables them to exploit economies of scale. Joint ventures with foreign firms have a positive impact on productive efficiency. Correa et al. (2010) find empirical evidence for a positive relationship between technology adoption (ISO certificates and web-use) and foreign ownership. Foreign-owned firms are embedded in international networks requiring frequent use of communications technology and technologies certified by internationally recognised technical standards. This assumes that the motive for holding local branches is to compete internationally. The more advanced countries become the smaller the technology adoption effect becomes, thereby confirming the idea of the technological frontier.

Preventing trade hampers both competition and performance. Both trade and foreign ownership are associated with more competitive pressure from foreign enterprises. Giving in to domestic political pressures, governments may try to soften competition by subsidising domestic firms or establishing barriers to foreign firms' operations or entry. This can have reverse effects on performance via reduced incentives (Clarke, 2011), thereby hampering industrial dynamism, innovation as well as efficiency and productivity growth.

3.4 Competition and antitrust policies

Competition-laws were introduced. At the beginning of the transition process most countries introduced extensive competition laws. In Europe this has often been spurred by the prospect of European Union accession. Competition policy aims to foster competition in general. It is therefore not only concerned with behaviour in markets, but also tries to influence market structure and advocate pro-market solutions (Vagliasindi, 2001). Essential elements of competition policy are anti-trust rules, which are established to hinder anti-competitive behaviour and thereby preserve market efficiency (Lyons, 2009). Anti-trust rules include

prohibition and persecution of collusions and mergers, which would limit competition, as well as abuse of a dominant position.

Competition policies affect the intensity of competition. Improving firm performance is a fundamental element underlying the transition process. Attempts to achieve this goal incorporate measures increasing rivalry and improving corporate governance (Estrin, 2002). The implementation of pro-competitive policies and anti-trust laws has effectively increased competition in the transition economies of Eastern Europe and Central Asia (Dutz and Vagliasindi, 2000a, 2002; Vagliasindi, 2001).

De-jure laws do not correspond to de-facto laws. There is a gap between de jure legislation and de facto implementation. Strong laws “on the book” do not necessarily represent effective antitrust policy. There appears to be a nonlinear relationship between adaptation of antitrust laws and the size of national economies. The impetus for adopting antitrust laws appears to be related to the guidelines of “model” laws (Nicholson, 2008).

Pro-competitive policies can be linked to firm level productivity increases. Ospina and Schiffbauer (2010) find a positive and robust causal relationship between proxies for competition and measures of firm productivity. Countries that implemented product-market reforms had more pronounced increases in competition. The contribution to productivity growth due to competition spurred by product-market reforms is around 12-15 percent. In particular entry deregulation determines the observed productivity increase.

Copying institutions of established market economies in transition countries is likely to be inadequate. Transition economies experienced difficulties implementing competition laws. It remains unclear how to best implement competition policies and design institutions that adequately cope with rapidly changing firm and industry structures. There is doubt that competition laws and policies in established market economies are appropriate for transition economies, where initial conditions, especially anti-competitive environments, differ fundamentally. The competition fostering instruments in established market economies have shown to be weak in countries starting a transition process. Not only market structures, but also habits favoured anti-competitive behaviour in transition economies (Fingleton et al., 1996). Anti-competitive initial conditions such as highly concentrated markets and an anti-competitive mindset, corruption and social networks create an environment with weak institutions that cannot sufficiently enforce competition laws.

Competition law is often implemented environments with poor capacities. Large discrepancies between competition rules and implementation capabilities can be observed

in many transition economies. Even though most countries adopted competition enhancing laws at the beginning of the transition process, the laws were not adapted to the special market situation of the specific country and ignored implementation capabilities. Empirical evidence suggests that while implementation has a strong positive effect on competition, a law on the book has none and is insufficient to ensure successful implementation. Furthermore, implementation capabilities increase with improvements in rules and institutional design (Dutz and Vagliasindi, 2000b). Therefore both institutional capability and knowledge about the initial conditions are necessary to successfully implement competition policies (Kovacic, 2001).

Changes to formal institutions occurred quite late in the transition process. Economists and policy makers largely assumed that institutions would develop without intervention and their importance has been underestimated. Therefore institutional aspects have been implemented rather late in the transition process. As a result, institutions, including the capital market, remain weakly developed. Transparency is often poor, and corruption and the exclusion of outsiders from markets due to social networks prevalent (Hare, 2013).

Competition law might reinforce weak institutional settings. It can be argued that competition policy, while needed in young and developing countries, should only be established at a certain stage of the country's institutional development. If laws or the policy enforcing institutions are weak or if corruption plays an important role in the system, competition policy can worsen the institutional background (Marcos, 2006).

Regulations may be biased and affected by corrupting behaviour. Regulations in transition economies are likely to be biased against captor firms in favour of influential firms. Empirical results suggest that captor firms are usually new firms. Influential firms are generally incumbents, and characterized by strong relationships to the government and policy makers, or are still state owned. This may occur through three channels. First, *state capture* is a situation where firms are involved in the creation of laws and other regulations through illegal payments to policy makers. State capture is more likely to occur if new entrants are confronted with the under-provision of public goods like the supply of private property rights. Second, *influence* is defined as firms being able to bias the formulation of rules and regulations to their favour without payments. Third, *administrative corruption* refers to influencing the implementation of laws and other rules by private payments to bureaucracies to the disadvantage of captor firms (Hellman et al. 2000).

Anti-corruption programmes support the establishment of a pro-competitive business environment. Corruption hampers the establishment of a competitive environment, due to difficulties prosecuting politically connected, influential firms and individuals (Hellman et al. 2000). Rigorous anti-corruption programmes have been introduced more often in transition countries with relatively low level of administrative corruption. This implies that countries with high level of corruption will find it more difficult to overcome this specific problem. Then again there is evidence that the level of state capture does not influence the adoption of anti-corruption programmes (Steves and Rousso, 2003).

Institutional improvements have been driven by knowledge. Education has shown to be a necessary and appropriate tool for the improvement of institutions. This concerns the education of business leaders, public officials and citizens about the advantages of a market system, which involved creating functioning institutions and the implementation of effective competition policies concerned with anti-competitive behaviour (Kovacic 2001).

4. Concluding remarks

Market competition was the pivotal element of the economic transition, replacing economic planning as the method to identify demand. The survey finds that the focus of economic research about the effects of competition shifted with the requirements of policy makers. The initial research agenda was dominated by the necessities of macroeconomic shock-management, including churn and job destruction. In later years, the research topics changed to economic freedom, technological upgrading and pro-competitive policies facilitating the transition.

The survey used the policy focus of the literature to structure the research topics into policy fields, including the restructuring of incumbent firms, domestic firm entry, openness to trade and FDI, and competition policies. While all of these have shown to be effective, their impact on the structural change varied. New firms and economic openness seem to have played the biggest roles.

25 years after its beginning, the transition process has largely been completed. As many transition economies advanced and entrepreneurial activities gained in complexity, a substantial degree cross-country variance in aggregate performance became obvious. This tilted the research agenda toward institutional questions and development economics.

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ANNEX: Summary of papers

Authors	Topic / Research Question	Method	Key findings
Aghion, P., Schankerman, M. (2000)	Social returns to infrastructure investments that foster market interactions and competition	Theoretical model	Infrastructure investments that foster market interactions and competition reduce transaction costs increase incentives to restructure and pressure inefficient firms to exit and spur efficient firms to enter the market.
Bartelsman, E., Haltiwanger, J., and Scarpetta, S., (2004)	Creative destruction in developed and developing (transition) economies	Empirical research using a generic database on firm demographics and dynamics covering 24 countries Productivity decomposition (within and between firm)	Entry and exit rates are fairly similar across industrial countries, post entry performance differs substantially. Transition economies show an impressive process of creative destruction. Those that have progressed the most towards a market economy show better outcomes from this process.
Carlin, W., Fries, S., Schaffer, M. E., Seabright, P. (2001)	Analyse the impact on firm performance of the following variables : ownership, soft budget constraints, the general business environment and a range of measures of the intensity of competition as perceived by a firm How much does competition matter for the growth and development of firms, and if it is significant, through what channels does it work?	Empirical analysis; 2SLS using BEEPS 1999 data	Competition has important non-monotonic effects on performance, growth of sales and of labour productivity. New product restructuring is an important determinant of sales growth and therefore performance. Pressure from foreign competitors and from customers to introduce new products, are significant determinants of restructuring. State-owned firms are less likely to engage in new product restructuring.
Carlin, W., Schaffer, M., Seabright, P. (2004)		Empirical analysis; IV, GMM using BEEPS data	Competition matters for firm innovation and growth. Better firm performance when firms face few rivals than if none. Less clear evidence that few rivals induce better performance than many (Schumpeterian view). Indication for an inverse-U relationship of competition and innovation.

Clarke, G.R.G. (2011)	How does competition policy affect different aspects of competition and how do these aspects of competition affect innovation?	Empirical analysis; ordered probit regression Huber-White standard errors Probit estimation BEEPS II (2002)	Stricter competition laws increase the likelihood that firms will introduce new products but decreases the likelihood they will introduce new production processes. The net effect of competition on innovation depends on the size of two opposing effects: stricter law implies higher pressure from competitors and which is negatively related to innovation activities higher domestic price competition and thereby less innovations Restructuring requires the imposition of hard budget constraints and increases in competition. These will ensure that changes in ownership have the desired positive effect on governance. Significant differences in performance - CEE outperforms CIS due to policy-induced incentive structures. Institutional weaknesses remain Access to complementary inputs and to international knowledge are positively related with technology adoption. The link between market incentives and technology adoption is more nuanced: consumer pressure results in technology adoption, competitor pressure does not, suggesting that only firms with rents are able to adopt technology given substantial resource constraints. Privatized firms exhibit better technology adoption outcomes but only when a clear private owner with a profit incentive is present. A negative association between governance and technology adoption on average in the ECA region is counter-intuitive but the effects are very small and driven by the CIS countries. Better governance is associated with technology adoption only in the countries that joined the European Union in 2004. Future increases in technology adoption by firms in the region will require complementary reforms of the investment climate.
Commander, S., Dutz, M., Stern, N. (2000)	Ownership, competition and restructuring	Literature Review; Policy discussion	Decision theoretic models might provide results consistent with the idea of an inverted-U relationship, indicating that an intermediate level of competition induces the highest level of investments in R&D for innovation.
Correa, P. G., Fernandes, A. M., Uregian, C. J. (2010)	How does the "investment climate", namely the incentive regime faced by a firm, access to complementary inputs, and access to international knowledge affect firms' technology choices in Eastern European and Central Asian countries?	Empirical analysis; Probit estimation; sector fixed effects using panel data from BEEPS 2002 and 2005	
De Bondt, R., Vandekerckhove, J. (2012)	Relationship between competition and innovation	Literature review of theories	

Game theoretic models provide mixed results, depending on the exact modelling approach.

Djankov, S., Murrell P. 2002	Enterprise Restructuring in Transition	Quantitative literature review	Pre-transition enterprises were state-owned, protected from competition, shielded from failure by soft budgets, and managed by production engineers with incentives oriented toward the plan or politics Enforcement and institutional effectiveness are both positively related to intensity of competition. Robust positive relationship between more effective competition policy implementation and intensity of competition as captured by economy-wide enterprise mobility. Robust positive relationship between effective competition policy implementation and expansion of more efficient private firms. Absence of any robust impact of competition advocacy There are sharp differences in both rules and implementation across countries and time. Of the countries that have improved rules, almost all appear to have been spurred by the prospect of EU membership. Competition law on the books is not a sufficient condition for effective implementation. Implementation is positively affected by improvements in rules and institutional design. Implementation has a strong positive relationship with economy-wide intensity of competition, whereas rules do not.
Dutz, M. A., Vagliasindi, M. (2000a)	What is the relationship between competition policy and intensity of competition? Assess the effectiveness of competition policy across transition economies	Empirical analysis; regressions using BEEPS II data (2002)	
Dutz, M. A., Vagliasindi, M. (2000b)	To what extent do competition policy rules and implementation differ in transition economies and do the differences have consequences for intended outcomes?	Empirical analysis using BEEPS data	

Estrin, S. (2002)	Explores the elements of institutional development critical to the enhancement of company performance in transition economies	Literature review	Initial conditions do not appear to have been a fundamental determinant of either reform paths chosen or of subsequent economic performance. There are sharp distinction in terms of policies followed and their impact between central Europe on the one hand and Russia and the CIS countries. Transition policies underlying enterprise restructuring must be regarded as complements, not substitutes. Privatization alone will not be enough. Enterprise reform will also require effective corporate governance and hard budget constraints.
Estrin, S., Meyer, K. E., Bytchkova, M. (2006)	Examine the opportunities and constraints for entrepreneurship offered by the evolving institutional environment	Theoretical model	The most crucial ingredients include economic growth and rule of law as these send a message on the success of reforms and quality of entrepreneurship. Other factors, such as political continuity or discontinuity, rapid and gradual change and state officials who are perceived to be supportive or hostile towards new enterprises can all be context for the successful development of a small firm sector.
Estrin, S., Mickiewicz, T. (2013),	Factors influencing entrepreneurship in transition economies	Theoretical model and literature review	Entrepreneurial activity rates are lower in transition countries than in comparable middle income economies. This results from: weak formal and informal institutions. There is a clear cut in the values of the population. The younger generation is more prone to engage in entrepreneurship.
Faggio, G., Konings, J. (2003)	Job creation and destruction in Poland, Estonia, Slovenia, Bulgaria and Romania.	Empirical analysis; regressions	In early transition job destruction dominated job creation. Job creation was picking over time. Most job reallocation occurs within, rather than between sectors. Ownership and firm size are the most relevant characteristics for understanding the dynamics of job flows. The patterns of gross job flows and firm growth were similar to those in market-based economies.

<p>This paper calculates both static and dynamic measures of productivity for a sample of Yugoslav enterprises over the five-year period 1975–1979. The influences of market share, export orientation, joint ventures, labor groupings, capital intensity, and regional development on the static efficiency measures and on the dynamic index and its components are also examined</p> <p>This paper argues that there are clear limits, deriving from the governance and ownership structure of firms, to what financial discipline can accomplish. The question is not so much whether a regime of hard budget constraints should be established, but whether it can be effectively established without adequate governance and ownership reforms.</p> <p>Ferrier, G.D., Klinedinst, M., Linville, C. B. (1998)</p>	<p>Empirical analysis. frontier models and productivity indices Panel data from a 5% stratified random sample of Yugoslav work organizations covering the five-year period 1975–1979</p>	<p>Greater market shares are positively related to productive efficiency. Joint ventures with western firms have a positive impact on productive efficiency. Good static performance does not necessarily imply good dynamic performance.</p>
<p>Frydman, R., Gray, C., Hessel, M., Rapaczynski, A. (2000)</p>	<p>Empirical analysis; Maximum likelihood estimates of binomial probit models Two step Heckman's estimates of sample selection models 1994 mid-size firm data survey in Czech Republic, Hungary, and Poland. (interviews and questionnaire)</p>	<p>There are clear limits to what financial discipline can accomplish in the absence of firm-level restructuring. The policy of hard budget constraints can be only partially successful in improving the revenue performance of state-owned firms unless accompanied by privatization. Conclusion is not that the hard budget constraints of the post communist reform policies should be relaxed. It is rather that these policies are not realistic unless accompanied by speedy privatization: firm-level restructuring is necessary complement</p>

Gorodnichenko, Y., Sveinjar, J., Terrell, K. (2010)	What are the effects of foreign competition and linkages with foreign firms on innovation by domestic firms?	Baseline probit specification with pooled data in the 2005 and 2002 BEEPS for domestically owned firms	Greater pressure from foreign competition stimulates innovation Vertical relationships (supplying multinationals as well as exporting and importing) induce innovation by domestic firms. There is no evidence for an inverted-U relationship between innovation and competition The relationship between globalization and innovation does not vary across the manufacturing and service sectors State capture (i.e. firms ability to shape laws and rules through illegal payments to politicians) and influence (i.e. as firms being able to influence the creation of rules without payments) exist in all transition countries. Captor firms are usually new firms, which engage in state capture to be able to compete with influential incumbents. Those, generally old firms inherited their influence from the time of the central planned economy and are characterized by strong relationships to the government or are still state owned. Most transition countries have a significant mismatch between national implementation capabilities and the demands of new competition laws. Institutional capability is very important, but weak. Law drafting and institutional design should build upon careful pre-reform analysis of economic, political, and social conditions. Developing countries need a competition policy. But a stable and strong institutional background in advance is necessary. If the rule of law and the legal system are weak and unpredictable, or if state organs and institutions are not well prepared, slow or corrupt competition policy will most likely be ineffective or even worsen the institutional background. By creating jobs, supplying consumer goods, constraining the market power of the state owned firms and building reform momentum, new firms have produced real welfare
Hellman, J. S., Jones, G., Kaufmann, D. (2000)	Corruption in transition economies	Empirical analysis using BEEPS 1999	
Kovacic, W. E. (2001)	Use the development of competition systems to examine economic law reform in transition economies	Theoretical model	
Marcos, F. (2006)	Is competition policy needed in developing countries? If so what kind of competition policy and how much?	Theoretical model	
McMillan, J., Woodruff, C. (2002)	Entrepreneurship in transition economies	Literature Survey	

gains.		
Strong laws do not necessarily represent effective antitrust policy. There is a nonlinear relationship between the adaptation of antitrust laws and the size of national economies. The impetus for adopting antitrust laws appears to be related to the guidelines of “model”. There is a gap between <i>de jure</i> legislation and <i>de facto</i> implementation.	<p>Nicholson, M. (2008)</p> <p>Interplay of <i>de jure</i> vs. <i>de facto</i> competition law</p>	<p>Empirical analysis; Composite index and cross country variance</p> <p>Empirical analysis; Productivity estimates (e.g., conventional OLS; Olley-Pakes; Industry and country fixed effects least absolute deviation) using World Bank Enterprise Survey data and macro variables (e.g., Penn World Tables Economic Freedom, World Index from the Fraser Institute)</p>
Positive causal relationship from competition to productivity (Competition induces lower markups and thereby higher TFP and lower labor productivity) Reforms have a positive effect on competition	<p>Ospina, S., Schiffbauer, M. (2010)</p> <p>What is the relationship between competition and firm productivity?</p>	
Rigorous anti-corruption programmes have been introduced more often in transition countries with low level of administrative corruption to begin with. This implies that countries with high level of corruption will find it more difficult to overcome this specific problem. New anti-corruption legislation aimed at reducing the opportunities for rent-seeking in areas such as financial transactions and political party finance are correlated with lower levels of some forms of administrative corruption	<p>Steves, F., Rousso, A. (2003)</p> <p>Corruption in transition countries</p>	<p>Empirical analysis; measure of anti-corruption policies</p>

<p>examines the main policy and structural determinants of the intensity of competition at the enterprise level across transition economies It explores the key variables, at the country and enterprise level, that affect the variations of the intensity of competition in domestic markets</p>	<p>Empirical analysis; Probit regression Ordered probit regression Multinomial logit regression Enterprise-level survey and a legal survey directed to both competition agencies and legal experts in the area of competition policy (Dutz and Vagliasindi) EBRD 1999 BEEPS 1999</p>	<p>Vagliasindi, M. (2001a)</p>
<p>Competition policy and recent changes in its implementation are significantly and positively correlated with the intensity of competition. Significant positive relationship between the intensity of competition, lower barriers to entry and exit, and higher perceived elasticity of demand. Evidence on the relatively poor achievements of privatisation policies in the way of achieving more competitive market outcomes</p>	<p>Competition policy and recent changes in its implementation are significantly and positively correlated with the intensity of competition. Significant positive relationship between the intensity of competition, lower barriers to entry and exit, and higher perceived elasticity of demand. Evidence on the relatively poor achievements of privatisation policies in the way of achieving more competitive market outcomes</p>	<p>Vagliasindi, M. (2001b)</p>
<p>Assess the effectiveness of competition policy rules and implementation across transition economies: What is the relationship with the intensity of competition? Are there regional patterns? What are the links between competition policy and economy-wide competition</p>	<p>Empirical analysis; generic data collected through a survey directed to all competition agencies in each transition countries BEEPS</p>	<p>Sharp differences in both rules and implementation both across countries and within different regions Regional patterns emerged, particularly for countries for which both better implementation and improved legislation appear to have been spurred by the prospect of EU membership for most countries Implementation has fallen short of legal standards Relevance of improving legal provisions on competition policy Implementation is characterised by a strong relationship with intensity of economy-wide competition Competition policy is found more effective than other policies in enhancing the intensity of competition (e.g. corporate governance and trade policies)</p>