Enterprise in Transition: A comparison of managerial incentives and institutional development in the Czech Republic and Hungary

Erin Leigh Simpler

Submitted to the Department of Economics of Amherst College in partial fulfillment of the requirements for the degree of Bachelor of Arts with Honors

Faculty Advisor: Professor A. Erinc Yeldan

Submitted on May 8, 2008
Acknowledgements

I would like to thank everyone that has helped me complete this thesis.

In particular I would like to thank my advisor Professor A. Erinc Yeldan who has given me invaluable advice and support on my thesis.

I would also like to thank the Economics Department for their incredible teaching and support throughout my time here at Amherst.

To my roommates, friends, and family thank you for all of the support, I could not have completed this if it wasn’t for your help and encouragement.
Abstract

In this thesis I looked at how institutions evolve under Communism and then during the transition to a market economy. I specifically looked at the incentive structure for managers in Czechoslovakia (the Czech Republic after 1993) and Hungary. The command-economy was plagued by incentive problems. Although planners tried to create an incentive structure that encouraged firm managers to maximize firm productivity, the nature of the planning process led to perverse incentives. Moreover, the structure of the Communist system led to the growth of the informal sector. In the 1960s, Hungary drastically reformed the planning process. It was an attempt to use market mechanisms to better incentivize managers. When the Communism ended in Eastern Europe, Hungary was one of the most reformed and Czechoslovakia one of the least reformed Communist economies. The different structures allowed for different types of moral hazard, rent seeking, and activities in the informal sector.

The fall of Communism represented an unprecedented institutional change in both speed and scope. The high uncertainty and low accountability of the early transition period led to new opportunities and incentives for rent-seeking by managers. Case studies of the incentives for rent-seeking and corruption during the transition of Czechoslovakia and Hungary shed light on the different institutions and networks that are created by different incentive structures. Not only were Czechoslovakia and Hungary on different ends of the Communist spectrum in regards to the structure of the planned economy, but their transition strategies differed. The incentive structure for managers, with implications for rent seeking, in turn was different. Hungarian managers had more autonomy a generation longer than Czech managers. This allowed for the building of different networks and institutions and to this day has allowed for a more entrenched form of “directly unproductive” activities and corruption.

The basic tenet of my thesis work rests on the claim that institutions cannot be created overnight. Although transition involved large-scale institutional change, the development of institutions in part depends on the past modes of behavior. Although the transition period of Hungary and Czechoslovakia was officially declared over upon their accession to the EU in 2004, the legacy of transition and Communism has altered the economic reality of Eastern Europe today and into the future.

Not only were Czechoslovakia and Hungary on different ends of the Communist spectrum in regards to the structure of the planned economy, but their transition strategies differed. The incentive structure for managers, particularly for rent seeking, was different as well. Hungarian managers had more autonomy a generation longer than Czech managers. This allowed for the building of different networks and institutions and to this day has allowed for a more entrenched form of corruption. By studying responses to the ERDB-World Bank Business Environment and Enterprise Performance Survey series, I show that bribe paying to officials by firm managers, also called administrative corruption, is more prevalent but also more efficient in Hungary compared to the Czech Republic.
Table of Contents

**Introduction**

0.1 Institutions and Changing Economic Systems 2

0.2 Why Managers 3

**Chapter 1: Managerial Incentives under Communism** 4

1.1 Introduction 4

1.2 Central Planning 5

1.3 Bargaining Economy 7

1.3.1 *Bargaining Effect* 8

1.3.2 *Ratchet Effect* 9

1.4 Surviving in a Shortage Economy 10

1.5 Time Horizon 13

**Chapter 2: Rent seeking and transition** 17

2.1 Introduction 17

2.2 Transition: An Overview 18

2.2.1 Gradualism or Shock Therapy? 19

2.2.2 Price and Trade Liberalization 20

2.2.3 Property Rights and Privatization 21

**Chapter 3: The structure of bribery in Hungary and the Czech Republic** 24

3.1 Pervasiveness of Unofficial Payments 26

3.2 Entrenched Bribery 29

3.2.1 Effectiveness of Bribes 30

3.2.2 Entrenched Bribe paying over-time 31
3.3 Perception of Corruption  34

Concluding remarks  38

Works Cited  40
List of figures

Figure 3.1 Percentage of responding managers in Hungary and the Czech Republic who answered that “unofficial payments are common” was frequently, usually, or always true. 28

Figure 3.2: Size of bribe payments known in advance 32

Figure 3.3: Perception of Corruption as a problem to business 35

Figure 3.4: Managers who reported that bribe paying is high but corruption is not an obstacle to business 37
Introduction

A specter is haunting Europe – the specter of Communism - Karl Marx

The lasting effects of communism can be seen throughout Eastern Europe and the former Soviet Union. When the Communist Parties of Central and Eastern Europe lost power in 1989, economic theories were unprepared for the aftermath. How does one create market institutions where once there were none? The transition of post-communist states to market economies did just that. It was not easy. Communist, state-owned enterprises were often irrationally built and economically unviable in a market economy.

Czechoslovakia and Hungary were both satellite states of the Soviet Union and in 1989 began large-scale institutional change to become market economies. Both countries have transformed their economies enough to gain accession to the European Union. However, their levels of economic development and innovation are below their Western European counterparts and corruption remains higher than said counterparts.

This thesis looks at how individuals respond to different incentive structures and how these develop over time. It also explores the historical dependence of informal institutions. The first chapter details governance in Communist Czechoslovakia and Hungary. The incentive structure created by the planning process and the command economy influenced behavior under Communism as well as during transition. While state enterprises in Hungary and Czechoslovakia were initially structurally similar, the drastic reforms in Hungary changed the structure of managerial incentives there. The second chapter details the transition process and the particular transition paths of the Czechoslovakia and Hungary. The final chapter analyzes a firm-level survey about bribe
It explores the current nature of bribe paying in the Czech Republic and Hungary.

**0.1 Institutions and changing Economic systems**

In uncertain circumstances, individual agents look to past behavior to determine what to do in the present. Institutional development is extremely complex and in part historically dependent. Behaviors that were effective in the past contribute to present behaviors (Frydman, Rapaczynski, and Turkewitz, 1997, 42). Institutions can be formal, official institutions such as banks, a capital market, and a court system. Institutions can also be informal patterns of behavior.

The transition from a planned to a market economy involves large institutional change. A successful market economy requires both formal and informal institutional change. As new economic and legal institutions are created, transactions which used to be legitimate or legal become illegal. Individuals’ expectations and perceptions of corruption are also affected. Expectations under transition could be wrought with over-optimism as to the levels of corruption in a new democracy. This increases the disappointment and perceptions of corruption among the people. Additionally, while the definition of corruption and what is considered legitimate changes, individuals’ actions may not follow suit. The legacy of communism could lead to increase incidence of corruption in the Western sense and upwards-biased perceptions about the pervasiveness of corruption (Andvig 2006).
0.2 Why Managers?

Managers have an interesting position in the Communist economy. The Communist economic structure was plagued by a low marginal productivity of labor. Reforming Communism involves altering their skewed incentive structure. Since transition involves massive redistribution of resources and often the dissolution of traditional political power, the opportunity for rent-seekers to seize power is significant. State enterprise managers had large opportunities for rent-seeking behavior and were able to play a large role in the transition economy. The interaction between managers and government officials is a good way to see the historical dependence of behavior and perceptions about that behavior.
Chapter 1: Managerial incentives under Communism

1.1 Introduction

The Communist Party took power in Czechoslovakia and Hungary in 1948 and 1945 respectively. Shortly after the Communist Party took power both countries adopted a Soviet-style command economy\(^1\). The Soviet Command Economy, in this thesis, is called classical Communism. Classical Communism was a drastically different economic system. It involved the nationalization and bureaucratization of production. The state seized control of all aspects production and investment in the economy. Private ownership of factors of production was eliminated. In classical Communism, firms were no longer autonomous economic actors. Firms became *units of production*. Central planners assigned inputs and required certain levels of output for each firm. Classical Communism centralized economic decision-making. In theory, the central planners use each firm’s production possibilities function to most efficiently allocate resources to achieve the social goals of the state.

In the decade following the transformation of central Europe to the classical Communist model, both Czechoslovakia and Hungary experienced significant growth in The Communist countries of Eastern Europe had an average growth rate of 10% from

\(^1\) This is also called a Stalinist-style, or classical command economy. The Communist Parties that rose to power in Central and Eastern Europe were heavily influenced by the Soviet Union. Countries like Czechoslovakia and Hungary became Soviet satellite states. The governmental and economic institutions of satellite states were modeled on Stalin’s economic model for Russia.
1951-1960 (Wilczynski, 1973, 17). Early Communist growth, however, came from several unsustainable sources. The early growth in Communism was extensive. That means that the growth was caused by increases in inputs. Intensive growth, resulting from increasing the productivity of inputs, accounted for much less of the Communist growth than the growth in Western Europe. In the 1960s growth rates began to decline, and in 1963, Czechoslovakia had a negative growth rate (Wilczynski, 1973, 17). Communist governments fueled this early growth by forcing high levels of savings and investment and forcing low wages and consumer prices (Olson, 2000, 114). By setting the wages and purchasing power of individual workers at a low rate and encouraging gender equality, the government was able to increase the labor supply. Although the increasing labor supply, led to early growth, this extensive growth is not sustainable. When the economy began to stagnate in the 1960s, planners recognized that labor productivity was not increasing enough to fuel growth. Labor productivity increases depend on technological increases and can also depend on incentives for workers. Efforts to reform the classical Communist model reveal the impact of labor incentives, managerial incentive in particular, on growth.

This chapter details the incentives structure of managers in both classical and later reformed Communism. Planners struggled to align managers’ incentives with the economic or production success of the firm. The planning process itself led to rent-seeking behavior by managers. The reforms of the 1960s changed the nature of the manager’s position and changed opportunities for rent seeking behavior.
1.2 Central Planning

The classical Communist model centralized economic decision-making. Central planning commissions created detailed Five Year Plans that determined production and its distribution in physical units. When the firms were initially nationalized, they were grouped into industries. The central planning process centers on these industrial groupings. When the top officials created long term social and economic goals for production, the central planning committee apportioned resources to the different industries based on the long term economic goals.²

Classical Communism aligned the state and economy in a single bureaucracy. Joseph Kornai described it as, “direct bureaucratic control of the economy” (1992, 117). Throughout the hierarchy of central planners, administrative officials, and enterprise managers each person was responsible for a more specific allocation of resources. Top party officials allocated emphasis on different industries. Central planners turned this emphasis into more specific allocations for industries. Officials in charge of subsections within the industrial grouping further specify resources based on their information about the production capabilities of different firms. Economic decisions about production and investment were only made close to the top, and information only came from the bottom (Kaser, 1970, 28). Moreover, each official in the chain only communicates with his or her

² An example of these goals is the Communist investment in heavy metals. This industry received more inputs from Central planners because it was a desirable industry. Government officials were not thinking about the economic rationality for heavy metal, but were thinking about developing the countries, or the Soviet Unions, war-making capabilities.
direct superior and subordinate. That means that no one can ‘go over someone’s head’. Since information could only come from a direct subordinate or superior, information can be distorted at every link in the chain.

State enterprise managers are an important link in the chain of the bureaucratic economy. In classical Communism most firms were organized in a very similar way and related to the state and central planners in a similar way (Berliner, 5). The role of an enterprise manager is to be a soldier of the state and carry out the specific orders of the Central planners. Firm managers are appointed, in practice, by the Communist party. A position of more authority is usually given as a reward for party loyalty, and is not necessarily based on merit. The managers of smaller firms are appointed by local parties whereas the managers of larger firms are appointed by the central party office.

1.3 Bargaining economy

The planning process is shaped by asymmetric information. Planning requires an assessment of a firm’s efficient maximum production potential. Planners then assign a plan that motivates the firm to produce the highest possible output, given the allocated inputs. The planners who make the decisions as to the size of the plan, however, do not know the firm’s production potential. They have less of a technical knowledge of the enterprise and less direct knowledge of the firm’s capabilities. Although plans appear to be created from the top down, the plan-in-action was based on bargaining. Each rung of the ladder was responsible for implementing the plan in more concrete terms. At each rung of the ladder the plan gets altered to adjust the government’s lofty goals to the
constraints of the firm. The command economy becomes, at the firm level, a *bargain economy*.

- **Bargaining effect**

  In the planning and bargaining process, managers had the opportunity and the incentive to underreport their maximum production potential. This is called the *bargaining effect*. The *bargaining effect* occurs because managers maximize their own payout. In the creation of the plan, the manager’s interests do not necessarily align with the interests of the firm. The incentive structure for managers rewards plan fulfillment or a slight plan over fulfillment over economic success. Moreover, if plans were not fulfilled, managers could lose their jobs. Managers have the information that is instrumental in the implementation of the plan, but also have a stake in the difficulty of the plan they receive. Since it was not the firm’s overall economic performance, but plan fulfillment that was favored in the classical Communist environment, managers had the incentive to underreport production capacity. Easier plans involve lower targets and more inputs. This leads to the opposite of a profit-maximizing manager in a market economy. Profit maximizing managers push for the higher outputs with fewer inputs.
The **Ratchet Effect**³

Another aspect of the central planning system incentivized the underreporting of production potential was the inflexibility of targets. Although targets could be bargained during the planning process, targets do not adjust for changes in production potential. If a firm over-fulfills its plan one year, the next target production level will be increased. Because plan targets are always ratcheted up but can never be decreased, this incentive is called “the ratchet effect”. Plans do not adjust down because of under-fulfillment, so the target levels of production can only increase for a firm, never decrease. The manager not only has the incentive to underreport the firm’s potential production but also to not fulfill the firm’s potential production. The *Ratchet effect* provides a disincentive towards maximizing production efficiency. Planners tried to encourage enterprise growth in the form of tightening constraints (Kaser, 1970, 103). This means that fewer inputs would be given to produce the same or more output the next year. This is also the ratchet principle and knowing that the planners will do this, managers had an even greater incentive to underreport potential and request more inputs than needed.

The *ratchet effect* helped contribute towards the stagnation of intensive growth. Technological innovation was not incentivized strongly. As soldiers of the economic plan, managers were meant to carry out the production orders on time. They were only responsible for production directives explicitly stated. The *ratchet effect* meant that they

---

³ The term, “Ratchet Effect” is widely used in the literature. (Kornai 1992) and (Dyker 1985) both describe this effect.
had a disincentive towards increasing production over the planned amount.

Technological innovation involves risk and risk could lead to under-fulfillment of the plan. The risk of an unsuccessful change in production was greater than the rewards to be gained for increasing productivity and over-fulfilling (Kaser, 143). Individual firms and managers do not get to control their own profits. This means that managers don’t have an encompassing stake in the economic success of the firm. They only have an encompassing stake in how well the firm can fulfill the plan.

Government officials recognized the disincentives for managers to innovate. The planners’ awareness is illustrated by the “rationalizers and innovators” program. Government officials implemented this program encouraged lower workers to submit proposals for improvements in production. These workers would receive monetary rewards for successful proposals (Kaser, 152). The power and incentive to innovate comes from a manager’s superiors but the ability to do so is limited by a lack of technical knowledge. This scenario is analogous to the entire classical Communist economic model. The individuals making the major economic decisions are the ones with the least knowledge about the specific implementation. The manager doesn’t have an incentive to take on this risk, above planners recognized that managers did not innovate but the initial changes like this program were not enough to change the structure that created disincentives to innovate.
Managers include the *ratchet effect* is a real cost of production that when making production decisions. This is clearly illustrated by the timing of production. A yearly plan is divided into monthly goals. The manager receives monthly bonuses based on over-fulfillment of planned production. The bonus potential is the same every month, but firms consistently produce more in the later months than the earlier months (Kaser 142). A firm’s output, in the eyes of the planners preparing next year’s plan, is extrapolated from a firm’s production in the first seven months of the year. Thus the timing of a firm’s production reveals a concrete way of underreporting production potential to maximize the possibility of future plan fulfillment.

### 1.4 Surviving in a shortage economy

The incentives to distort and underreport production capacity arose out of structural and practical circumstances. More than just worrying about increased plans in the future, managers had to anticipate and preempt practical problems in the execution of the plan. These problems centered on the supply chain. Although inputs were allocated to a firm by planners, this was no guarantee that supplies would arrive on time and at the necessary specifications.

Expecting some of their supplies to be unusable, a firm manager often requested more raw materials or inputs than the firm needed to fulfill the plan. Clogs in the supply chain and delayed deliveries were common and meant that a firm does not have enough supplies to fulfill its plan (Berliner, 1954, 23). Managers insured against stopped production by requesting more supplies than necessary. Supply shortages also influenced
the specialization of enterprises. Firms that produced a broader range of products were better off than those that produced a smaller range of products (Berliner, 128). This is because if a certain material is delayed, the manager can transfer manpower and other materials to a different product. They can concentrate on over-fulfilling a different product to make up for the under-fulfillment of the limited supply product.

One of the causes of the shortages in the supply chain was irrational pricing. Prices were not standardized. Administrators set prices to encourage a certain ratio of goods, but this did not necessarily take consumer demand into account. Prices were used in accounting between enterprises and at times reflected supply-side cost. They were assigned by administrators of the central plan and could be based on social or other non-economic concerns.

A manager’s success in the shortage reality of classical Communist planning often depended on his or her relationships with others. The Soviets called it Blat, but the conditions that gave rise to it in the Soviet Union were a reality in all classical Communist economies. Blat means giving favors to get what you need. This means paying money or providing favors to government officials or other managers to obtain supplies or something else beneficial. This was often used to secure a small amount of supplies so that a factory could continue running even if it hasn’t received its allocated shipment yet. Blat was not looked down upon, but also not openly discussed (Berliner 54). It became an informal institution that governed how firms relate to government officials.
1.5 Time Horizon

While career advancement and prestige are the long term incentives, the payment of premia determines behavior in the short-run. Managers maximize premia within their given constraints. There is ample evidence that the premia associated with various aspects of plan fulfillment affect managerial behavior (Kaser, Berliner). Communist governments even recognized the motivations behind managers’ actions.

*The Great Soviet Encyclopedia* even discusses “material self-interest” in a positive way. It says:

*Socialism not only does not deny the private material interest of working people in the results of their work, but elevates this interest to a higher place than in any preceding systems of production. The private material interests of socialist working people in raising the productivity of their labor is directed toward the goal of all the people, toward the strengthening and growth of social wealth.*

This means that the planners and government officials recognized that material incentives could enforce the economic plan. They needed to align the material interests of the manager with the interests of the economy.

---

4 This quote comes from *The Great Soviet Encyclopedia* as quoted in (Berliner 50)
The specific quantifications of the plan influence the behavior of firm managers. This means that how the plan assesses firm performance and production affects the behavior of managers. Managers are looking to first and foremost fulfill the production plan. The firm manager’s continued employment and opportunity to advance in the hierarchy of the state depends on plan fulfillment. Plan fulfillment was seen to best reflect performance and result in premia (Berliner 71). Plan fulfillment, however, can mean different things. The Stalinist system measured output in physical terms. At times prices of items were used to quantify output but these prices were assigned and did not reflect demand. The plan calls for a firm to produce a specified amount and assortment of goods. The amount of a good produced can be stipulated in different ways. One economic performance indicator used was the volume of output. Plan fulfillment and ensuing premia would be determined by the actual number of items produced. This resulted in over fulfillment of small, easy to produce items over more complex ones. This indicator also does not take cost of production into account and provides a high incentive to push for easier plan targets and hoard supplies (Wilczynski 4). Another indicator is the value of output produced. Plan fulfillment was measured by the value of output produced and above a certain amount; a percentage of that output was paid to managers. The value of output also does not take into account cost and resulted in an overproduction of expensive items regardless of demand (Wilczynski 5). The value added was also used as an indicator. This prevents the use of expensive materials to overstate economic performance because it only takes into account the value of non-material inputs. This indicator, however, led to the substitution of labor for materials,
when possible (Wilczynski, pg 6). Since the marginal product of labor is downward sloping, increasing the labor inputs on a product decreases labor productivity. A common factor in the managerial response to these different indicators is the simulation of economic performance. Managers maximize their potential rewards and while their production choices maximize their own benefit, this does not necessarily align with the benefit of society.

In response to stagnant growth and falling productivity in the 1960s both Czechoslovakia and Hungary began reforming the classical Communist command economy. In 1964, Czechoslovakia’s Central Committee of the Communist Party resolved to create a ‘New Economic Model’ (Shaffer 1977). The reforms that this model proposes reveal the incentive problems that leaders recognized. The reforms drastically changed the role of firm managers and their incentive structure. Hungary was simultaneously pursuing similar reforms. The ‘New Economic Model’ introduced profit as the main performance indicator. The new model used market forces within a planned framework. That means that while broad national Five-year and One-year plans will still be created by the Central Planning Committee, economic decision-making will be decentralized. The enterprise managers will be given more discretion in terms of production. With the added freedom comes increased responsibility. To better align the manager’s interest with the interest of society, the ‘New Model’ utilized profit as the indicator and profit sharing as the new premia. Planners recognized the problems with information the centralized planning system was plagued by. The people with the power to make economic decisions did not have accurate information to do so. By
decentralizing economic power, the information gap was reduced. There was less of an incentive to bargain because from managers’ perspectives, plan fulfillment became less important than profits. By changing the indicator of performance success from a physical quantity to profits, many of the skewed incentives of the classical system were erased. Profit sharing better allowed the interest of the manager to be aligned with the economic interests of the firm. By 1969, Czechoslovakia was in line to become one of the most reformed Communist countries in Europe. Czechoslovakia and Hungary enacted these reforms simultaneously. However, in 1969 Soviet troops invaded Czechoslovakia and forced the regime to revert to classical Communism. Until 1989, it remained one of the least reformed Communist countries in Europe. Hungary was able to successfully enact many of the reforms that Czechoslovakia had tried.
Chapter 2. Rent seeking and transition: Changing managerial incentives in the transition to a market economy

2.1 Introduction

In 1989, the face of Europe changed forever. The Soviet Union gave up its hold on the Communist states of Europe and in almost uniformly bloodless coups, Communists were ousted from office. This end to the Communist government was an end to a whole way of economic, political and social life. It began the long road of transition from a centrally-planned economy to a market economy.

This chapter details the transition process for Czechoslovakia and Hungary. Transition creates different incentive structures for managers. Firms have to learn how to function in a different economic system and managers have to learn how to survive and succeed in a different political economy. The power and incentives of Hungarian and Czech managers are different during transition. The differences in Czechoslovak and Hungarian institutions explain the different incentive structures. Two main factors contributed to the differences in institutional development. The institutional changes under Communism contribute to the institutional reality during transition. As discussed in the previous chapter, the reforms of Central-planning in Hungary altered the autonomy and incentive structure of Hungarian managers compared with managers in Classical Communism. The second factor affecting the comparative institutional development of Czechoslovakia and Hungary is the speed and implementation of market reforms affected managers’ incentive structure and behavior.
The transformation of both political and economic institutions had never occurred so quickly or on such a large scale as in the 1990s when Eastern Europe and the Soviet Union began transition. A generation of people who only knew the Communist way of life had to change their entire economic structure. Moreover, the power structure shifted after the fall of the totalitarian communist regimes. The loss of power of the Communist Party gave enterprise managers an increased opportunity to vie for power and wealth.

The incentive structure that individuals operated in under communism changed. Firms had to operate in a decentralized economy. The change in economic and political structure provided new opportunities and incentives for rent seeking and corruption. These activities helped shape the economies of transition countries. This chapter details the changing incentive structure seen by managers. In particular it focuses on the different opportunities and incentives for rent seeking and corruption in the transition of the Czech Republic and Hungary.

2.2 Transition – an overview

The transition in Eastern Europe was so unique because it required the creation of markets and their corresponding institutions in industrialized economies. The end goal for each country undergoing transition was a functioning, stable market economy. Markets should be the main mechanism for allocating resources. In the post-communist environment this involves the restructuring of existing markets and the creation of new markets to facilitate capitalist exchange. The broad, main steps to achieve this goal were widely agreed upon. These steps included price and trade liberalization, firm
restructuring, changing the relationship between government and enterprises by hardening firm’s budget constraints, encouraging growth of the private sector, and reforming legal institutions. Economists disagreed on the specific implementation of these steps and their timing at the outset of transition. Even almost twenty years later when over twenty five countries have undergone or are still in the process of transition, there is no consensus as to how best to transform an economy.

- Gradualism or Shock Therapy?

Two opposing strategies of transition divided Economists and politicians. The two strategies are called gradualism and “shock therapy”\(^5\). Gradualism involves gradual economic reforms and the creation of temporary transition institutions to build a market economy. Proponents of the gradual method of transition argue that capitalist institutions take time to form and change should not happen overnight. Liberalization and privatization should take place in an environment where private enterprises can flourish. A stable market economy requires market-supporting institutions such as a capital market and a level of government regulation of business. To proponents of the Shock therapy approach these market institutions will develop out of market interactions. Shock therapy involves rapid reforms and restructuring. Advocates of Shock therapy fear the uncertainty and instability of the quasi- market period during transition. Gradual reforms could lead to stagnation of the transition process. Incomplete reform hinders growth and increases

\[\text{\ldots}\]

\(^5\) This type of transition strategy is also referred to in the literature as the “big bang” approach to reform.
the barriers to entry. The quasi-market and quasi-planned economies could perpetuate indefinitely (Frydman et. al). Shock therapy prevents this because it is much harder to reverse Shock therapy reforms.\textsuperscript{6} Shock therapy supporters feared the quasi-market equilibrium and capture of the state over the economic costs of rapid reform. Even fifteen years after transition began there is no consensus on the ideal transition strategy.

- **Price and trade liberalization**

One of the first steps of reforming both the Hungarian and the Czechoslovak economies was to restructure the price market. Price liberalization and rationalization were necessary to facilitate capitalist exchange. In a market economy, prices depend on supply and demand. The price reflects both the cost and the value of a good.\textsuperscript{7} Under central planning, prices were determined by administrators. As discussed in chapter 1, administratively set prices did not reflect demand. For an open, market economy to exist, prices need to be rational and in line with world prices. Communist inexperience with rational pricing is shown by extreme, rapid price fluctuations in the beginning of price liberalization.\textsuperscript{8}

---

\textsuperscript{6} Individual reforms can be undermined by officials and many players in transition benefit from halting liberalization and privatization early. These will be discussed in the next section.

\textsuperscript{7} Prices in perfectly competitive markets are a function of the marginal cost to producers and the marginal value to consumers.

\textsuperscript{8} Firm managers did not know how to rationalize and normalize prices. Often prices were liberalized through a trial and error method. This can be seen in drastic price changes from day to day in many transitioning countries.
While neither the price structure in Czechoslovakia or Hungary was rational under Communism, Hungarian economic reforms changed the initial position of both countries’ pricing. When Communism fell in Czechoslovakia, one hundred percent of product prices were administratively determined. In the reformed and decentralized Hungarian economy, only fifteen percent of prices were fixed administratively (Frydman et. al). By 1991, both countries had few price subsidies and unified, fixed exchange rates.

- **Property Rights and Privatization**

A major part of transition is the restructuring and restoration of property rights. This involves sufficient legal institutions to protect property rights and a reformation of socialist property rights. Property rights, in the context of transition are the consolidation of ownership rights and affect firm behavior. Joseph Kornai, in his modeling of the socialist system, names property rights as a major flaw of the system. Firms were owned by everyone and therefore by no one. Although a government minister takes the position of the owner of a firm when interacting with managers a lack of property rights and ownership affects this relationship. Neither the minister nor the manager gets to keep most of the firm’s profits so the incentive to maximize profits is absent (Kornai 1992). Neither the minister nor the manager has an encompassing interest in maximizing profits. Privatization can increase the incentive to make a firm financially viable because a private owner has an encompassing interest in long term success and has a stake in the profits. Moreover, privatization reduces the chance of moral hazard of soft budget constraints (Louzek 2005). A separation of firm and state, never before seen in
communist countries, helps prevent the moral hazard that insulates firm managers from the risk of losses.

The gradualism versus shock therapy divide pervades the implementation of privatization schemes. Gradualism can give the government time to assess enterprises and find a “strategic owner” who can best maximize the firm’s potential (Louzek 2005). Also, a gradual approach lessens the shock to the economy of any reforms (Feltenstein and Nsouli 1998). Gradualism can allow for increased confidence in the success of transition. A reform could be enacted, be successful with a lesser shock to the economy, and thereby increase confidence in the next reform. Shock therapy privatization, however, asserts ownership rights faster and separates the state from the firm. A major fear during transition is rent seeking by managers. Asset stripping is a major way for managers to rent-seek. Asset stripping means transferring capital, money, or even parts of an enterprise to private accounts or companies controlled by the managers. In State-owned enterprises or SOEs, opportunities for managers to rent seek are high and accountability is low. Accountability is low because the ownership rights are not developed and the legal institutions to enforce ownership rights are also underdeveloped. Moreover, managers’ behavior in the transition period is based on a very short time horizon. This is because transition and the period of privatization are associated with high aggregate uncertainty. Transition of this nature is an unprecedented event and as with anything unprecedented, uncertainty is high. Moreover, as ownership changes, the
manager’s job and even an enterprises’ survival is in jeopardy. While shock therapy privatization decreases the amount of time managers can rent seek, it also increases the incentive to rent seek. The uncertainty involved with privatization, however, is increased with the shock therapy approach.

Czechoslovakia, and the Czech Republic in particular following the split of Czechoslovakia in 1993, took a shock therapy approach to transition. The first president after Communism, Vaclav Havel, was a large supporter of shock therapy. In fact, one of the reasons for the split of Slovakia and the Czech Republic was the disagreement over transition strategy. Most reforms were enacted quickly and simultaneously. Between 1991 and 1992, Czechoslovakia enacted large-scale reforms. These included the beginnings of privatization, macroeconomic stabilization, and price and trade liberalization. Hungary was much further liberalized at the start of transition and has taken a gradual approach.

---

9 The requirements for a managerial position in a planned economy are very different from a market economy. In a communist country, managers had to be political. This means that they had to have large informal networks to be able to obtain the necessary supplies and follow plans in a shortage economy. They also had to be loyal to the Communist Party. The human capital in a market economy has to have different skills.

10 The Communist planners tried to smooth out industrialization geographically in Czechoslovakia. This meant a lot of money was invested in industrial ventures in the more agricultural Slovakia. Many of these newly created firms were not geographically efficient enterprises. Moreover, the initiative to industrialize undeveloped areas was part of the extensive growth of the Stalin era. As a result, Slovakia had more inefficient enterprises that would no longer be viable in a market economy. Slovakia was in a position to have larger losses and a larger shock in a shock therapy transition (Roland 23)
Chapter 3: The structure of bribery in Hungary and the Czech Republic

The specter of Communism still affects how managers relate to public officials. Different types and levels of corruption and corrupt practices reveal the specific institutional paths of Czechoslovakia and Hungary. This chapter analyzes the current economic milieu for firms in the Czech Republic and Hungary. Specifically it looks at the differences in the manifestation of corruption in these two countries. The data comes from the ERDB-World Bank Business Environment and Enterprise Performance Survey series (BEEPS I, II, and III). BEEPS interviews managers or owners of firms in European countries in transition about how the firms interact with the government and other aspects of the business climate. There are questions about crime, corruption, regulation, and firm financing.

The BEEPS survey was conducted in three rounds. Similar surveys with identical implementation methods were conducted in 1999, 2002, and 2005. The first round interviewed a total of 4,104 firms in 26 formerly Communist countries. In 2002 the sample grew to 6667 firms. In 2005, 9,655 firms were interviewed. For the 1999, 2002, and 2005 surveys, the sample size in the Czech Republic was 149, 268, and 343 managers respectively. In Hungary, 147, 250, and 312 managers were interviewed in the three rounds.

--------------------

11 Turkey was included in the survey, although it was not formerly Communist.
Firm-level surveys like BEEPS are able to indicate corrupt actions more specifically than most other corruption indicators. Corruption literature often uses corruption country-indexes like the Corruption Perception Index (CPI)\(^\text{12}\) that emphasize the opinions of industry experts rather than managers themselves and in so doing become measures of the perceptions of corruption in a country rather than the incidence of corruption in a country. The perception of corruption levels can be dependent upon on cultural biases and past institutional experiences and may not reflect the actual level of corruption. BEEPS has questions both about the perceptions of corruption in a country and the actual incidence of firm bribe paying. It provides a clearer picture of administrative corruption in a country.

BEEPS is a good firm-level corruption survey because it gives managers incentives to respond honestly. Ritva Reinikka (2006) discusses the criteria that make a good firm-level corruption survey. BEEPS fits these criteria in three main ways. First, this survey emphasizes its separation from the government or any body that would punish corrupt behavior. The BEEPS interviewer emphasizes the survey company’s separation from governmental organizations and the anonymity of the results.\(^\text{13}\) Second, this survey

---

\(^{12}\) The Corruption Perception Index is administered by Transparency International. It uses expert and opinion surveys about the perception of corruption to rank corruption from 180 countries (http://www.transparency.org/policy_research/surveys_indices/cpi).

\(^{13}\) The BEEPS 1999 survey emphasizes the anonymity of results when the interviewers says, “I would like to assure you, that the information obtained here will be treated strictly anonymously and confidentially. Neither your name nor the name of your firm will be used in any document based on this survey. Neither the European Bank for Reconstruction and Development nor the World Bank will be informed of any individual firms’ responses or participation in this survey.”
avoids implicating managers in wrongdoing. Questions about “unofficial payments to officials” were worded to put any blame for corrupt behavior on the state. Furthermore, the BEEPS surveys emphasize that “We do not imply in any way that your company makes unofficial payments/gifts.” Third, this survey establishes trust between the interviewer and respondent by asking many questions before mentioning any corrupt behavior. The BEEPS survey is a reliable measure of corruption that allows for the unbundling of mechanisms of corrupt transactions, separating state capture and administrative corruption.

I will be looking at administrative corruption – more specifically bribery of government officials.

---

14 The first question about “unofficial payments” in 2005 (Q.39a) said that firms “have to pay…” ’additional payments/gifts’ to get things done”. This implies that the system is corrupt and it is not the firm choosing to make these payments.

15 BEEPS II and III also ask questions about “unofficial payments” that “firms like [the respondents]” make.
3.1 Pervasiveness of Unofficial payments

A number of questions in the three surveys examine the incidence of bribe-paying when firms are interacting with public officials.

The first question dealing with this asks

Thinking about officials, would you say the following statements are always, usually, frequently, sometimes, seldom or never true?

“It is common for firms in my line of business to have to pay some irregular “additional payments/gifts” to get things done ” with regard to customs, taxes, licenses, regulations, services etc

While this question does not directly ask if the respondent’s firm pays bribes to officials, that is essentially what it measures. If a manager says that the statement, firms commonly have to pay irregular payments to get things done, is Always true, that means that the manager commonly pays those payments himself or that many of the firms the manager knows make similar payments. The question is worded like this to avoid implicating the responding manager in any wrongdoing.
Figure 3.1 shows the percent of all responding managers in Hungary and the Czech Republic who answered that the statement was *frequently, usually, or always* true.

While most firms do not usually have to pay bribes “to get things done” when dealing with the government, bribe paying is still part of the reality of the post-communist economy for a large subset of firms. This figure shows a decline in the prevalence of unofficial payments in both countries. Decreasing bribery is consistent with larger corruption trends in the transitioning economies of Europe ([Anticorruption in Transition III](#)). The decreasing levels of bribe paying are consistent with the notion that as legal institutions develop, the state is better able to enforce its own laws.

---

16 Anticorruption in Transition III mainly uses the larger BEEPS dataset to study corruption in transition countries. A different measure of corruption, Transparency International’s Corruption perceptions index, however, indicates a different
Moreover, Hungary and the Czech Republic, both prospective EU members in 1999 and 2002 had help and the incentive to reduce corruption. Prospective EU membership decreases the uncertainty in transition by providing an end goal, specific requirements, and support for institutional development. While uncertainty of transition is decreased, the costs of bribe-paying are increasing. Application to the EU requires that a country develop its legal system to better police corruption in business. If the legal system has developed and has increased its ability to enforce laws against bribery, the cost of corruption increases.

*Figure 3.1* also indicates that Hungary has a higher incidence of bribery than the Czech Republic for every year measured. Hungarian managers have had more autonomy than Czech managers for longer, but both the incentives during reformed communism and the incentives under the gradual transition method explain this higher level of bribe paying. The Hungarian incentives for bribe paying grew out of its institutional history. Further explanation will be more thoroughly laid out in the following section.

---

17 EU membership has been a goal of transitioning European economies since Communism fell.

18 In 2005 the measures of bribery in the two countries were almost identical. Less than a percentage point separated
3.2 Entrenched Bribery

Entrenched corruption is when bribe paying is known to be necessary by both parties. It is not a rogue firm who bribes officials one time, but many firms who pay bribes to officials over repeated interactions. Entrenched bribery is a reflection of the institutional development of transactions. My hypothesis is that bribery is more entrenched in Hungary than in the Czech Republic.

- Effectiveness of bribes

One indication of bribery entrenchment is how effective bribes are.

*Thinking about officials, would you say the following statement is* 

*Always, Usually, Frequently, Sometimes, Seldom or Never true?*

“If a firm pays the required “additional payments” the service is usually also delivered as agreed”

This question, in the 1999 survey, looks at the effectiveness of bribes. Do bribes actually “get things done” like the first question implied? One of the reasons why corruption hinders growth is because of the difficulty in enforcing bribe contracts. Extralegal interactions cannot be enforced through the legal system. Bribes, however, can be enforced by repeated interactions. Managers wouldn’t continue to pay bribes if it they knew an official was unlikely to perform the action.
Hungary has more effective bribes than the Czech Republic. Seventy two Hungarian managers and seventy one Czech managers responded to this question. 94.4% of Hungarian managers answered *Always, Usually, or Frequently true* to the above question. This is compared with 73.24% of Czech managers. This means that bribes in Hungary are more often effective. Bribes in Hungary are more effective because of repeated interactions and entrenchment.\(^\text{19}\)

- **Entrenched bribe-paying over time**

  *Thinking about officials, would you say the following statement is*

  *Always, Usually, Frequently, Sometimes, Seldom or Never true?*

  “*Firms in my line of business usually know in advance about how much this ‘additional payment’ is*

The purpose of this question is to gage the nature of interactions between the firm and the state that involve bribery. It speaks directly to the level of bribery-entrenchment in a country. Are bribes firm-driven or have they become an entrenched part of the relationship between officials and firms? If a firm usually knows the *price* of bribes, the transaction is driven either by the government official or by custom. If the government official previously expressed a bribe amount, then they are driving the ‘unofficial’

\(^{19}\)Another explanation for ineffective bribes is that officials are taking bribes and making promises for things that are out of their control. It could be the case that Hungarian officials have more power than Czech officials to do the things they promise to do. The entrenched corruption explanation is more likely, however. This is because the analysis of the next question supports the claim that bribery in Hungary is more entrenched than in the Czech Republic.
transaction. If a government official does not expressly *charge* a bribe amount, but the firm knows from experience that a bribe is necessary and how much to pay, then bribery has gone beyond just a single unofficial transaction. Bribery has become entrenched.

**Figure 3.2:** Bribery payments known

![Bribe payments known](chart)

Figure 3.2 supports my hypothesis that bribe paying is more entrenched in Hungary than in the Czech Republic. Hungarian managers much more frequently know in advance how much bribes will cost. The chart depicts the percentage of managers who responded *Always, Usually, or Frequently true* to the statement about knowing in advance the amount of payments.

Bribes are more systematic and systemic in Hungary than in the Czech Republic. *Prices* of bribes were more often known in advance and these bribes more often resulted
in the promised outcome for firm managers. Both of these characteristics of Hungarian “unofficial payments” reveal entrenched bribery. Looking at this information through the institutional lens one can see how the development of institutions in Hungary led to more entrenched corruption than in Czech Republic. Under classical Communism managers would bargain with and give gifts and favors to officials to succeed and survive in the shortage economy. Both the Czech Republic and Hungary have to some extent entrenched corruption. They both had this institutional past where bribes were a common way to interact. Because Hungarian managers had more autonomy in a quasi-planned economy; they developed different relationships between the firm and the state. Managers would still bargain about the plan, but since the plan was less strict this moved to bribery to receive investment funds. This form of bribery is part of the path dependence of institutional development. Institutions depend on the behavior that have been successful in the past. Bribery, in trying to win state contracts, is one of the forms of bribery corruption today.

Entrenched corruption in Hungary is decreasing over time. As EU-supported institutions develop, they reduce the opportunity and incentive for bribe paying and taking. Bribe takers and payers both have an increased incentive not to participate in bribery. Entrenched corruption is in part a result of repeated interactions between firms and government officials. Two possibilities arise, in this framework, explanations for decreased institutionalization. As discussed earlier, either the incentive structure for bribery has changed or repeated interactions between firms and government officials has been reduced.
3.3 Perception of Corruption

- Corruption as a problem to doing business

Hungary has shown higher incidence of corruption. More firms have to pay bribes in Hungary than in the Czech Republic. The incidence of corruption is not necessarily correlated with how administrative corruption is perceived in these countries.

One question that directly asks about the perception of corruption as a problem for growth is:

*How problematic are these different factors for the operation and growth of your business?* No obstacle, Minor obstacle, Moderate obstacle, Major obstacle

This question does not ask about how often bribes are paid, but rather asks managers’ opinion about the impact of corruption. Institutional development is often dependent on past experience. Bribe-paying, an illegal but widespread practice under Communism could still be considered an efficient and acceptable business transaction by many. Entrenched corruption could be perceived as less of a problem, although it is more pervasive, because it has surpassed a behavior of the periphery and reached the level of a societal convention. If administrative corruption is commonplace, citizens could become desensitized to it and no longer see corruption as a problem for doing business. If they
are used to having to bribe official under communism this behavior will be seen as the norm, not the exception.20

Figure 3.3: Perception of corruption as an obstacle to business

![Perception of Corruption](image)

Although more firms in Hungary have to pay bribes to officials, more managers in the Czech Republic feel that corruption is an obstacle for business growth. The transition strategy of the Czech Republic and Hungary could have affected the perceptions of acceptable behavior (Aslund 2006). Hungary began privatization even before the fall of Communism whereas the Czech Republic transitioned using something closer to Shock

---

20 A similar distorted perception is seen, according to the World Bank report on BEEPS 1999 Survey implementation, in reports about transportation infrastructure as a problem for business. Managers didn’t know anything other than a poor infrastructure. Although an outsider’s perspective revealed a very insufficient infrastructure, the managers did not know it could or should be any different.
Therapy. Shock therapy involves a large shock to the system. This is a signal by the government that the country is in a dramatically different economic system\textsuperscript{21}. This dramatic change of the economic system signals a dramatic change in behavioral norms. Therefore, it seems that the gradual transition of Hungary from a Communist economy to a free market allowed the behavioral norms of the Communist economy to remain entrenched in the system, even after the economy became liberalized. The Czech Republic’s shock therapy approach, on the other hand, seems to have shocked the acceptance of corruption out of its behavioral norms.

A closer look at a subset of respondents reveals even more compelling evidence about the differences in the way bribery is thought to impact business in the two countries. Figure 3.3 looks at the perceptions of corruption of managers that reported a frequent incidence of bribery\textsuperscript{22}. The chart shows the percentage of managers who reported a high incidence of bribery but a low impact of corruption. Corruption is consistently seen as less of a problem in Hungary than in the Czech Republic, even by the managers who observe high levels of bribery.

\textsuperscript{21} Shock therapy indicates the government’s commitment to dramatic change. Shock therapy reforms are much harder to reverse. (Aslund 2006) argues that a shock like this is needed to change behavior.

\textsuperscript{22} Frequent incidence of bribery mean those managers that answered the question about the necessity of “unofficial payments” as Always true, Mostly true, Frequently true.
**Figure 3.4:** This chart shows the % of managers that report Bribe paying is high, but corruption is not an obstacle to growth

Even if both countries defined corruption in the same way, there is another reason why corruption is perceived as more or less harmful for business. This perception could reflect reality. More Hungarian firms have to pay bribes, but these bribes are more entrenched in firm-government interactions. This entrenchment means that when most officials receive bribes, they perform the promised service, making entrenched bribery essentially an unofficial tax. It is part of how the system works, and although bribery can lead to inefficient allocation of resources, the system works with it. Bribery in the Czech Republic, is more of a hindrance for business because since it is not entrenched in the same way as it is in Hungary, when bribes are paid in the Czech Republic, it is less likely that the service will be completed as promised.
Chapter 4: Concluding Remarks

In this thesis I looked at how institutions evolve under Communism and then during the transition to a market economy. I specifically looked at the incentive structure for managers in Czechoslovakia (the Czech Republic after 1993) and Hungary. The command-economy was plagued by incentive problems. Although planners tried to create an incentive structure that encouraged firm managers to maximize firm productivity, the nature of the planning process led to perverse incentives. Moreover, the structure of the Communist system led to the growth of the informal sector. In the 1960s, Hungary drastically reformed the planning process. It was an attempt to use market mechanisms to better incentivize managers. When the Communism ended in Eastern Europe, Hungary was one of the most reformed and Czechoslovakia one of the least reformed Communist economies. The different structures allowed for different types of moral hazard, rent seeking, and activities in the informal sector.

The fall of Communism represented an unprecedented institutional change in both speed and scope. The high uncertainty and low accountability of the early transition period led to new opportunities and incentives for rent-seeking by managers. Czechoslovakia and Hungarian Case studies of the incentives for rent-seeking and corruption during the transition of Czechoslovakia and Hungary shed light on the different institutions and networks that are created by different incentive structures.
Not only were Czechoslovakia and Hungary on different ends of the Communist spectrum in regards to the structure of the planned economy, but their transition strategies differed. The incentive structure for managers, particularly for rent seeking, in turn was different as well. Hungarian managers had more autonomy a generation longer than Czech managers. This allowed for the building of different networks and institutions and to this day has allowed for a more entrenched form of corruption.

Transition strategy also affected Hungarian institutional development. Institutions cannot be created overnight. Although transition involved large-scale institutional change, the development of institutions in part depends on the past modes of behavior. Although the transition period of Hungary and Czechoslovakia was officially declared over upon their accession to the EU in 2004, the legacy of transition and Communism has altered the economic reality of Eastern Europe today and into the future.


