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On Improving Egypt's Economic Performance:
The Costs of Exchange

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This paper draws on several earlier papers. See Alexandra Benham and Lee Benham, 'Costs of Exchange', Working Paper, 1992; Alexandra Benham, Lee Benham and Michael Merithew, 'Institutional Reform in Central and Eastern Europe: Altering Paths with Incentives and Information', International Center for Economic Growth, 1995; Alexandra Benham and Lee Benham, 'Property Rights in Transition Economics: A Commentary on What Economists Know', prepared for the National Research Council, 1997. I greatly appreciate the collaboration of Alexandra Benham on this paper. Comments from Lawrence Chickering have been very helpful.

ABSTRACT

This paper suggests a way to characterize the costs of exchange—what individuals have to give up in total resources, including money, time, and goods, to execute a transaction successfully. It also discusses some institutional reforms to lower these costs, and offers some suggestions to policy makers in Egypt. The costs of exchange are imposed by such barriers as: Bad laws, poor enforcement, corruption, administrative discretion, and monopoly practices. Their effect is to inhibit productivity and growth. Systematically collecting and publicizing information about them makes it harder to defend and maintain them.

ملخص

تقترح هذه الدراسة طريقة لتحديد تكاليف إجراء المعاملات الاقتصادية وتشمل هذه التكاليف ما يضحى به الأفراد من موارد مثل المال والوقت والسلع لتفيذ معاملاتهم، وتناقش كذلك بعض الإصلاحات المؤسسية المقترحة والتى تستهدف تخفيض هذه التكاليف. وتربط هذه الدراسة تكاليف إجراء المعاملات بوجود عدد من المعوقات مثل القوانين غير الملائمة والتنفيذ السيىء لها والفساد والتسيب الإدارى والممارسات الاحتكارية، والتى تؤدى إلى تخفيض الإنتاجية وتحجيم فرص النمو الاقتصادى. وتذهب الورقة إلى أن تجميع البيانات والمعلومات عن هذه المعوقات وإتاحتها للدراسة والمتابعة سيجعل من الصعب الدفاع عنها أو إبقائها على حالها

١. Introduction

What are the costs of exchange, and why are they so important to economic performance? The costs of exchange are the costs involved in the transfer of goods or services across individuals, across space, and over time.[١] This paper proposes a way to measure them, illustrating with some examples from Egypt. It discusses some institutional reforms elsewhere—successful and unsuccessful—which have attempted to lower these costs. Finally, it offers some suggestions concerning what individuals, groups, and policy makers can do in Egypt regarding these costs.

To begin with a theory of economic productivity, suppose that you are back in fifteenth-century Germany, on a boat taking 100 logs down the Rhine River. Every 20 kilometers or so there is a castle on the river's edge, where you must stop, account for your cargo, and pay a fee—usually half of the cargo—before your boat can continue. After traveling 120 kilometers with many delays, the cargo of 100 logs will be reduced to a single log. This is a dramatic example of barriers to exchange, yet from a historical perspective it is not an extreme example. In most times and places, high barriers to trade, and low levels of exchange and specialization, have been the common experience; and in most places and times, people have been very poor.

The basic theory of economics concerning the source of economic productivity is this: *economic performance depends fundamentally on how costly it is to exchange goods and services.* If the costs of exchange decrease, individuals will exchange more. As specialized output becomes less costly to exchange, the benefits of specialization will increase, and individuals will shift toward more specialized activities. This in turn will increase productivity and raise income. This argument concerning the link between the costs of exchange, specialization, and productivity is hardly new—it forms the central thesis of Adam Smith's *The Wealth of Nations*, published in 1776.

In the present day, castles are not so dominant, but exchange is often hampered by their counterparts: barriers such as excessive regulations, bureaucratic discretion, political uncertainties, tariffs, taxes, state-owned monopolies, judicial delays, corruption, and organized crime. In Egypt, as elsewhere, many individuals are aware of particular barriers to

[١] The distinction between the costs of transformation, i.e., production, and the costs of exchange is of course not absolute; nor is the distinction between capital and labor. The always imperfect classifications we use depend upon their theoretical interest and their empirical use fulness. The view taken here is that the costs examined are important and have been largely ignored. The costs of exchange include the costs of:
1) gathering information relevant to the transaction (such as characteristics of the goods, buyers, and sellers);
2) contracting for the exchange;
3) waiting;
4) executing the exchange;
5) measuring contract fulfillment, and
6) enforcing the contract.

exchange, which they encounter frequently. The specific facts are rarely a surprise. Providing a framework to organize these facts into a broader perspective is the objective of this paper. This entails several points:

- How to characterize these barriers,
- how to measure them,
- how to link the underlying institutions—the formal and informal rules of the game—to these barriers, and
- how to make these barriers and the associated rules of the game more visible to citizens and policy makers.

Economists and policy makers sometimes give lip service to these costs, but in practice may ignore them.[٢] National income accounts include information on taxes and tariffs but little on the other elements of the costs of exchange. One cannot readily look them up in trade publications. Often, only individuals who directly face the barriers know some specifics about these costs. In many instances, even such direct observations cannot be made because the exchange costs are so high that no actual transactions take place.

The costs of exchange are shaped by the institutional features of a society, including judicial procedures, government policies, bureaucratic procedures, tax policy, and the extent of state-owned enterprise. Virtually every institutional arrangement has some rationale, such as consumer protection, national defense, or other socially acceptable reason. Those who benefit from an arrangement usually argue that its benefits are high and its costs are low.

To reduce the costs of exchange, we must discover where the barriers are and which ones impose high costs.[٣] In any country, there are many 'castles' blocking exchange. They may be well disguised or even invisible. By looking at the costs incurred by those attempting to trade on various 'rivers' of exchange, we can locate the significant blocking points.

Neither castles nor institutional arrangements disappear simply in the face of cries for reform. Without a strategy and a measuring rod to focus efforts on specific barriers where the net benefits of reform will be high, the gains from reform can be easily obscured and the efforts quickly dissipated. Attacking the wrong castles, or attacking too many simultaneously, is not the path to victory.

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[٢] Douglass North, Yoram Barzel, and Thrainn Eggertsson have examined the implications of these costs for societies. See Douglass North, *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, 1990; Yoram Barzel, *Economic Analysis of Property Rights*, Cambridge University Press, 1989; Thrainn Eggertsson. *Economic Behavior and Institutions,* Cambridge University Press, 1990.

[٣] Ascertaining the costs of particular barriers, for example, of the castles along the Rhine, is complicated for several reasons. The costs imposed by these barriers depend upon the substitutes available. If there are three comparable rivers but only two of them have castles, the costs imposed by the castles will be relatively low. However, if castles are then built along the third river also, the marginal impact will be high. Thus the full impact can only be ascertained by examining the substitutes available. One reason for concentrating on the costs of exchange as incurred by participants in a market is that these costs reflect the alternatives available.

2. Exchange Frontiers

To investigate the costs of barriers to exchange, consider the perspective of an individual seeking to engage in exchange. With whom can the individual cost-effectively trade, over what distance, and over what time period? The feasible distances along these dimensions—persons, space, and time—define the exchange frontier. For any given good or service, the distance along each dimension will be limited by the costs of exchange.[4] The greater the distance over which exchanges can take place across persons, through space, and over time, the greater the extent of the market, the level of specialization, and the level of output.[5]

Consider first the range of other individuals with whom one can trade cost effectively. If contracts are not credibly enforced by the law or by other third-party arrangements, exchange will be concentrated within sets of individuals who know and trust each other. At the limit, this set may include only immediate family members. As credible third-party enforcement increases, the exchange frontier can expand from the highly personal to the impersonal, to include extended family members, clans, social groups, national groups, and even foreigners.

The geographic distance over which one can trade obviously depends upon physical characteristics of the goods being traded, and on the environment: mountains, rivers, weather, and systems of transportation. It also depends upon the costs of information, measurement, and enforcement. What are the costs of learning about options for exchange locally versus at a distance? Are there low-cost ways to measure the characteristics of the product? How credible is enforcement of contracts at a distance? What about taxes, tariffs, the likelihood of theft?

The time period over which an individual can trade cost effectively varies greatly across societies. Policy uncertainties, price controls, and inflation can reduce this dimension. In some settings, trading possibilities are limited to immediate spot transactions. Where the costs of exchange over long time periods fall (for example, when interest rates fall), the time horizon will increase. Given the appropriate institutional circumstances, it may be feasible to enter into an exchange with a person not yet born, the exchange to be finally consummated generations into the future. Some Swiss insurance contracts have these characteristics.

In a highly restrictive environment, individuals can trade only a tiny distance along each dimension. In Albania during Hoxha's rule, the government severely limited internal trade by

[4] Clearly, this frontier will vary with the type of good or service to be exchanged. Also, as with many frontiers, an individual may not be physically constrained from crossing over this frontier, but the crossover would not be cost-effective.

[5] This perspective does not deny the role of specialization in the exchange process. After all, most individuals do not want to enter directly into, say, a futures contract for wheat. In a highly productive economy, most individuals go to specialists to obtain such services. These specialists are often anonymous, which is the point: Without impersonal enforcement mechanisms, such specialization would not be possible. The perspective here is that of an individual who cannot change the rules and who is a price taker. In any system with a given set of prices and institutions, individuals can go only so far along any of these dimensions to trade.

imposing heavy sanctions against individuals involved in exchange. The policy concerning external trade was autarkic, with the objective of self-sufficiency. The basic argument is that countries with such limited opportunities for exchange will be very poor, as Albania was.

While Albania under Hoxha can be considered a pathological case of limits on exchange, many countries exhibit institutional characteristics that severely restrict the exchange frontier. For example, where the value of currency is highly uncertain, as in a period of hyperinflation, exchange may be reduced to barter. Where there is no effective third-party enforcement, transactions are self-enforcing and usually highly personalized, the pattern of trade characteristic of many poor countries. Individuals with strong family, social, or political connections—those with the means and ability to enforce informal contracts—will garner a disproportionate share of the gains from trade. Individuals without such connections will have fewer opportunities. These differences will affect the degree of specialization and productivity, and also the stratification of society, the structure and ownership of industry, and distribution of income.

3. Estimating Some Costs of Exchange

This framework focuses on the costs and constraints faced by individuals seeking to enter into exchange in a given society. It suggests that we estimate directly the costs which such individuals incur in exchanging particular goods and services. The basic economic concept of opportunity cost is central here: what do individuals have to give up in total resources, including money, time, and goods, to execute a transaction successfully? For many important exchanges, a conventional market price is not available, or if available is a very incomplete reflection of opportunity costs. The task then is to learn, sector by sector, what costs are incurred by those seeking to engage in exchange there. These results can be used to make comparisons across countries.

The costs of exchange may differ substantially across individuals in a society. For example, those who have strong personal networks wherein trade can take place face different costs than those without such a network. Therefore, estimates must include specification of the characteristics of the individuals conducting the exchange. A useful starting point is to ask what the costs would be for a newcomer without an established personal network. This will reflect the full opportunity costs of executing a particular exchange, which often involve paying someone in a developed network to act as agent.[6]

The initial approach thus involves estimating the costs incurred by an individual without personal connections who wants to execute some transaction in a specified sector of the

[6] Within any society there may also be subgroups which have particularly high or low costs because of their legal or informal status, e.g., slaves.

economy. Examples include starting a new business, importing an item, transferring the title to a piece of property, or obtaining a telephone. The objective in this paper is not to provide precise estimates of these costs but simply to illustrate how to calculate them. Unlike many concepts in economics, these costs are familiar to the citizens of every country. They have resonance for the person in the street. The most widely known application of this perspective is de Soto's book *The Other Path.*[٧] At the time it was written, obtaining legal permission to open a small garment factory in Peru took 289 days of full-time work.

Consider the cost of obtaining a telephone. There can be little doubt that telephone communication greatly reduces the costs of exchange. If the opportunity cost of obtaining a telephone is high, this has important consequences for the number of people who obtain a telephone and the size of an individual's exchange frontier. In Cairo today, the official price for obtaining a telephone is 1000 Egyptian pounds ($295 US dollars).[٨] The waiting time can be one to two years. To obtain an urgent line, with an expected wait of two to three months, the cost is 3000 Egyptian pounds ($885 US dollars). These official prices understate the cost of obtaining a telephone, at least in some Cairo neighborhoods. When an apartment is purchased, the buyer may pay the additional price of 4000-6000 Egyptian pounds ($1180-$1770 US dollars) for an operating telephone. This price reflects the overall portfolio of costs, including waiting time and other barriers associated with obtaining a telephone. These costs may not be exact, but they are apparently well known.

When an individual in Cairo buys an apartment and registers the transfer of ownership, 12% of the apartment price is paid to third parties: 6% for taxes and 6% for a lawyer to register the transfer as required by law. If the individual chooses to use a real estate agent, this costs approximately 1.5% of the apartment price. In the US, in St. Louis, Missouri, the cost of legally transferring ownership is approximately 1.5% of the sale price.[٩] In addition, the services of a real estate agent, if hired, cost 6% of the sale price. These differences in rates are striking. Fees in the sector monopolized by state control are eight times higher in Cairo than in St. Louis, while in the competitive sector they are only one-fourth as high.

The cost of obtaining spare parts is another important element of the costs of doing business. Consider the cost of obtaining an essential engine part—a crankshaft—for a heavy earth-moving tractor. Without the part, the tractor will not run. In Egypt in October 1996, the cost of obtaining this part legally within a week was 30,611 Egyptian pounds ($9057), while in the US it was LE11,130 ($3,293).

[٧] Hernando de Soto, *The Other Path: The Invisible Revolution in the Third World*, New York: Harper & Row, l989.

[٨] I would like to thank Hala Fares for help in obtaining these estimates for the telephone, apartment and crankshaft.

[٩] For comparability, in this example we disregard fees as sociated with borrowing money to make the purchase. In the US, buyers typically do borrow, using the residence as collateral, to make the purchase, and the borrowing process involves additional fees. This, however, is another transaction. Real estate is r egulated locally in the US, and some states have substantially higher costs than Missouri.

Another example is the spread between the interest rate at which banks borrow from savers and the interest rate at which they lend. This provides an explicit estimate of the cost of exchange between a lender and a borrower. This spread in Egypt during the period 1990-95 is more than three times as high as in the UK. Note that these spreads are likely to understate the total differences in the cost of obtaining funds, because the other elements of opportunity cost are not included.

Table 1. Average Interest Rate Spreads, Selected Countries, 1990-95

Egypt	7.29%
Jordan	5.98%
Spain	3.7%
UK	2.25%
USA	2.64%

Source: Mahmoud Mohieldin, 'The Egypt-EU Partnership Agreement and Liberalization of Services' Working Paper #9, ECES August 1996.

Several points can be made about these examples. First, there is substantial variation across countries in these costs of exchange. The price of a telephone in Egypt is over 16 times as high as in Malaysia. The price of a tractor part in Egypt is nearly three times as high as in the United States. The interest rate spread in Egypt is over three times as high as in the United Kingdom. Large non-subtle blocking points are likely to be responsible for these large differences in costs of exchange. Egypt appears to have powerful castles along the paths of exchange, castles which are removing substantial cargo.

We would expect large differences in costs to have substantial effects on economic performance. Countries with high costs of exchange will have great difficulty competing with countries where those costs are low. In high-cost countries, even if wages are very low, businesses cannot compete on export markets in complex specialized items that involve many exchanges. They will be able to compete internationally only in items that involve low levels of exchange and specialization.

Some examples of institutional reform addressing these costs are considered below. A central feature in the successful cases is credible commitment

The Glorious Revolution of 1688

A successful example of institutional reform is the Glorious Revolution of 1688 in England. Prior to the Revolution, the Crown repeatedly reneged on previously-agreed-upon terms. It sold monopoly grants which expropriated the value of existing investments and reduced the expected returns on all investments. The Crown broke promises, seized assets, and openly fired judges who disagreed with it. All executive, judicial, and legislative powers were combined in the Crown, and few external checks existed.

The Revolution changed the rules of the game by credibly constraining the Crown’s ability to manipulate the rules. Restrictions on monopoly were enforced, and all cases involving property were tried at common law. The Crown's control over the judiciary was eliminated, and modifications in land tenure favored private rights and markets. New political rights protected citizens against arbitrary violations of their economic rights. The dethroning of Charles I and James II provided precedents of retribution against irresponsible behavior by the Crown. The Crown could no longer legislate unilaterally or bypass Parliament—the Crown was constrained.

Parliament also agreed to put the government on a sound financial footing. After these changes were instituted, people were more willing to trade over longer time spans, private long-term investments became more attractive, and interest rates fell. The lowered rates made clear the benefits of these new institutional arrangements to all parties, thereby helping to win permanent support for the new system. Over the following 10 years, the interest rate the English Crown had to pay to obtain long-term loans fell from 14% to 7%. Over the next four decades, this rate continued to fall by more than half, to 3%. This dramatic decrease was an extraordinary development with profound implications for the subsequent prosperity of England. The success of the Glorious Revolution highlights the economic benefits of credibly constraining discretionary behavior by government decision-makers.

A successful economy with a high degree of specialization requires low costs of impersonal exchange across space and time. In order to achieve this, the state's commitment not to interfere arbitrarily in the functioning of the economy must be credible. When macroeconomic policies lack credibility, the resulting uncertainties about taxes, deficits,

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Douglass C. North and Barry R. Weingast, ‘Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth -Century England’, in *The Journal of Economic History* 49 (4): 822-823 (1989).

One of the best empirical studies on this general question, by Levy and Spiller, examines regulatory structures and performance in the telecommunications industry in a variety of countries: Jamaica, the UK, Chile, Argentina, and the Philippines. The telecommunications industry requires highly specific long -term investments which can easily be expropriated through changes in regulatory policy. Levy and Spiller argue, "Performance can be satisfactory under a wide range of regulatory procedures, so long as three complementary mechanisms are in place to restrain arbitrary administrative action: substantive restraints on discretionary actions by the regulator, formal or informal restraints on changing the regulatory system, and institutions to enforce the restraints." Brian Levy and Pablo T. Spiller, eds., *Regulations, Institutions, and Commitment: Comparative Studies of Telecommunications* , Cambridge University Press, 1996.

price controls, and inflation raise the costs of contracting. Individuals respond on many margins, such as lending to the government only for short periods of time at high rates of interest, or investing and trading primarily in personalized contexts within the informal sector. During hyperinflation, time horizons shrink dramatically and trade may be reduced to barter.

At the microeconomic level, a lack of credible rules concerning contract enforcement, property rights, or regulations raises the costs of exchange. As official third-party enforcement becomes less certain, the comparative advantage of other sources (like the Mafia) increases.

Self-governing Groups: Irrigation Systems in Nepal

Most individuals and small groups are not in a position to influence reform directly at the national or the industry level. However, they can often bring about innovations at the micro level. Many self-governing groups at the local and regional levels have organized to lower the costs of exchange and of overall production. The likelihood that such groups will form depends on the extent of traditions of cooperation and self-governance, knowledge concerning what has worked elsewhere, and impediments caused by government or by extralegal groups.

Fortunately, a number of studies have systematically addressed sources of success within self-governing groups. One such study examined more than 120 irrigation systems in Nepal, some of them farmer-managed and some government agency-managed. The investigator devised a scale of institutional development based on monitoring and sanctioning rules.[١٢] While 75% of the farmer-managed systems scored high on this scale, only 29% of the agency-managed systems did so. The farmer-managed systems averaged 20% more crop yield than the agency-managed systems.[١٣]

The lessons to be drawn from this example are general ones. If performance is properly monitored by those who benefit from the monitoring, this will enhance the efficiency of trade and production. This can be relevant to many other problems, such as those of import or export groups who collectively face impediments; apartment owners who can enhance the value of their property by introducing more effective self-governing methods amongst the owners in a building; or industry groups trying to collectively develop information systems which lower costs overall. Success in overcoming common-pool problems often depends

[١٢] A system received 1 point for each of the following criteria it met: 1) information was kept about water withdrawal rights, 2) information was kept about levels of water appropriation, 3) information was kept about farmers' individual contributions to maintenance, 4) information was kept about levels of rule conformance to the system rules, 5) sanctions were included which varied from low to high, and 6) water withdrawals could be forfeited for some infractions.

[١٣] Elinor Ostrom, 'Neither Market Nor State: Governance of Common-Pool Resources in the Twenty-first Century', Bloomington, Indiana: Workshop in Political Theory and Policy Analysis, Indiana University, 1994.

upon group ability to keep the state from excessive intrusion that may destroy these cooperative arrangements.

Russian Reform in the Early Nineteenth Century

The history of reform in Russia shows that putting rules of the game in place to facilitate market exchange requires more than knowledge and support by those in high authority. Even before the publication of *The Wealth of Nations*, Adam Smith's ideas on the gains from trade were circulating in Russia. Russia's first minister of economics, N. W. Mordvinov, who served from 1810 to 1825, envisioned splendid prospects if Smith's principles were implemented in Russia:

"Russia is gifted by nature and is destined to become wealthy once the spirit of competition starts to burn among the people; when productive forces are joined together, when private gain will be employed for social leadership, and when the government's leaders with warmth in their hearts......realize that private and public poverty is caused only because all the roads to wealth are barred, that the free action of the people is chained and that there is an artificial distinction between the wealth of the government and that of the people."[١٤]

To achieve this goal, Mordvinov proposed an extensive set of reforms, which differs little from the list of proposed reforms given by economists around the world now, 200 years later: reducing tariffs; building roads between cities; redesigning commercial banks; denationalizing government-owned factories; redesigning the financial system; reducing military expenditures, and opening land ownership. Although Mordvinov succeeded in getting some laws passed, he was unsuccessful over many decades in implementing market reform. Knowledge of appropriate reforms needed and support at the top are not always sufficient.

Property Rights, Land Privatization, and the Mafia in Sicily

The experience of land reform in Sicily shows what can happen if the state judicial system does not credibly enforce contracts. Feudalism was formally abolished in Sicily in 1812, removing feudal restrictions on property rights to land. For the first time, land was treated as a commodity that could be traded—a fundamental reform to those who believe that low-cost exchange is important to development. Between 1812 and 1860, the number of large landowners increased tenfold, from 2,000 to 20,000. Between 1860 and 1900 the number of hectares of land in private hands tripled.

[١٤] Glen Alexandrin, 'N. W. Mordvinov (1754 -1845): Father of Economic Freedoms in Russia?', *International Journal of Social Economics* 20:171-180, 1993.

Land reform was accompanied by considerable strife, in part due to the hostility between church and state. Early Italian liberals were strongly anticlerical, and after the unification of Italy in 1861, the church's property was expropriated. Pope Pius IX countered by rejecting the legitimacy of the newly formed Italian state; in 1877 he ruled that no Catholic could run or vote in national elections. This policy reduced the legitimacy of the state and increased the reliance on private enforcement of contracts.

Gambetta describes how the process began:

"At the same time [as the land reform], protection—the demand for which was dramatically increased by the abolition of feudalism and the widespread introduction of private property rights—did not undergo the customary process of centralization to become the monopoly of the state. Unlike land, protection, according to standard political theory, is not supposed to find its way onto the markets, but in southern Italy it did. The skills developed in the cities by the self-policing of trade fraternities and in the country by private guards, once released from baronial control, found new applications."[15]

Although the Mafia is associated with Sicily in general, the Mafia's actual level of power and control differs significantly across regions. Eastern Sicily has been little influenced by the Mafia, while western Sicily has been severely affected by it. Gambetta suggests a reason for this striking regional difference. On the east side of Sicily, the ruling classes were relatively cohesive, with few absentee owners, and they managed to preserve the monopoly over force, and denied power to the Mafia. In western Sicily, the local elites—particularly new landowners—were divided by conflict, and the state was less successful in establishing its authority. The 'protection' industry—private contract enforcers—flourished as a result.

The Italian state attempted to restrict the activities of the protection industry—the Mafia—but the protection groups made adjustments to sustain a comparative advantage in many forms of trade. Land reforms increased their opportunity to become independent and well established. Subsequently, as they established credibility, their credibility itself became an asset for expanding into other activities, and the industry became self-sustaining.[16] Moreover, the Mafia became deeply involved in manipulating the political process.

What Can Be Learned?

[15] Diego Gambetta, *The Sicilian Mafia: The Business of Private Protection* , Cambridge: Cambridge University Press, 1993. See also Douglass North and Robert Thomas, *The Rise of the Western World: A New Economic History*, Cambridge: Cambridge University Press, 1973.

[16] The Mafia's credibility and power to resolve disputes impose enormous costs on the polity. In the south of Italy today, Mafia-related murders per capita are 25 times the rate in the north. The Mafia continues to deform normal business practice, raise costs of exchange, and reduce productivity, particularly in activities where entry can be effectively controlled—like the fish market in Palermo—or where resources are allocated through the political process. See Robert Leonardi, Regional Development in Italy: Social Capital and the Mezzogioro, *Oxford Review of Economic Policy* 11 (2): 165-179, 1995.

These historical cases emphasize the fundamental importance of credible constraints on opportunistic behavior at the national and local levels. First, political control over assets frequently increases the costs of exchange, induces inflation, diminishes trade horizons, and reduces asset value. Second, local conditions, measurement costs, incentives, and governance procedures affect the likelihood that common-pool problems can be overcome. Third, knowledge of correct policies and support at the top are not sufficient to implement policies to expand the exchange frontiers. Fourth, if the state judicial system is ineffective at enforcing contracts, the whole system can become deformed and perform at a much lower level. Successful reform is possible, but one must take into account path dependence. The past constrains the choices which individuals or nations face in the present. History matters.[١٧] Informal constraints in particular are deeply imbedded and hard to change.

4. What Is To Be Done?

Bad laws, corruption, inappropriate bureaucratic incentives, excessive taxes, a weak judicial system, lack of credibility in government policy, large-scale state-owned enterprise, low levels of cooperation within groups, and ignorance of successful experience elsewhere—all will be reflected in high costs of exchange and low levels of specialization and output. The diagnosis is clear. Low costs of exchange are fundamentally important, but impediments to change are large. There are many separate blocking points to address, some very well defended. They cannot all be addressed by a few central decision makers, nor by simply importing reforms from elsewhere. What is to be done?

The strategy I suggest is based on two assumptions: 1) the specific path to successful institutional reform is not now completely clear; 2) successful and sustained reform depends upon persuading a substantial part of the population—politicians, bureaucrats, media people, intellectuals, religious leaders, businessmen, economists, and citizens generally—that reform is appropriate, sensible, and in their long-term interest.

Whether reform paths will work depends in part on how strongly the population holds them to be credible. Persuading a population that a reform path is desirable and credible depends in part on setting the terms of debate. Economists are generally better at diagnosis and at persuading one another than at setting the terms of debate in the public political sphere where the credible commitments have to be made. The standard economic critique of economic performance involves terms like liberalization, privatization, competitiveness, savings ratios, free trade, GNP, trade deficits, and efficiency. For most people—including many who support liberalization—these concepts are rather vague. Individuals generally have difficulty thinking of concrete empirical examples of the benefits of privatization or free-trade

[١٧] Douglass C. North, *Institutions, Institutional Change and Economic Performance* , Cambridge: Cambridge University Press, 1990, p. 94. North stated, "The consequence of small events and chance circumstances can determine solutions that, once they prevail, lead one to a particular path."

policies. They may generally be aware that countries which have liberalized (for example, Chile) have done well, but even supporters of liberalization seldom offer specific and relevant examples. Given this lack of linking policy to outcomes, it should be no surprise that those in the castles who would lose from liberalization—and those who oppose liberalization because of concerns about justice and equity—are not persuaded.

Competition, privatization, and free trade are not ends in themselves for most individuals, but are instrumental in producing desired outcomes. The costs of exchange can clearly link theory to practice and outcomes. The costs of exchange are salient. High costs are not readily defensible. All this can be effectively communicated. They also provide a way to monitor the consequences of policy makers' actions and increase their incentive to reduce these costs. Vague concepts like efficiency do not easily translate into consistent, credible, transparent signals on a day-to-day basis for policy makers.

One great attraction of this approach is that initiative is not limited to political decision makers. Individuals and groups outside the government can ***make the costs of exchange more visible***. This requires systematic attention sector by sector, but it is not excessively complicated or expensive. This is the rare case in which one individual can make a difference by increasing transparency concerning the costs of exchange. Students, trade groups, newspapers, research institutes, aggrieved parties, new entrants, and political groups can all participate. Governments typically report many kinds of outcome measures, such as statistics on national income performance, but these measures are often incomplete, inaccurate, inappropriate, and untimely. The government should not have a monopoly on the supply of information. Competition in the supply of such information is important.

To this end, one specific recommendation is that an independent research group in Egypt hold a conference annually to present the costs of exchange in various sectors. This would be a forum where individuals and groups facing these costs could present their estimates. The result would be a short summary document showing where Egypt stands vis-à-vis other countries concerning costs of exchange.[١٨] The objective would be to estimate the cost of undertaking particular (representative) exchanges, like obtaining a telephone, within a given period of time. The questions would vary by sector and by the social and political status of the parties to the transactions. The choice of particular transactions would be made on the basis of discussion with informed parties within each industry. What does it cost to import a particular good? To export a good? To transfer title to land? To sell or buy a good in another city in Egypt? To open a new business? To contract at a distance?

[١٨] Some of these costs are calculated now but often buried in vo luminous reports with thousands of other numbers. I have not found sources where this information is aggregated and summarized.

Since low barriers to entry are important for the competitive process, focus should be on the cost incurred by individuals who are not well connected, on those who have to pay the full cost. These are real, not theoretical, costs and are much more salient to citizens than government statistics concerning official prices, GNP, or trade deficits. If the illustrations shown earlier are representative, the costs of exchange in Egypt are often several times as high as in high-income countries. This will draw attention to these costs and to the blocking points which give rise to them. Such costs provide a basis for choosing which reforms are likely to have more impact and a focal point around which reform efforts can be organized. They also provide a benchmark for policy makers and citizens to use in measuring reform progress in each sector.[19]

If these costs are calculated over many sectors of the economy, then the blocking points may be uncovered and mapped more systematically. While each individual may be aware of some particular blocking points, mapping the whole cost-of-exchange terrain will provide an opportunity to focus attention more systematically on the sources of constrained frontiers. If these costs are collected over time, then they also provide a readily verifiable measure of progress or lack thereof.

Most reform efforts are bedeviled by the lack of verifiable and credible ways to measure progress. The cost-of-exchange metric does not require massive resources, so private groups can estimate and verify the measures for themselves. For example, it is not difficult for anyone to find out the prices of similar apartments with and without a telephone. In each sector, there are likely to be individuals who already have the relevant information. These metrics are also easily understood by the population at large and can be used to mobilize support for economic reform. Finally, this is a relatively neutral measure of performance across ideologies. Once identified, high costs of exchange are not easily defended: few individuals wish to argue that high exchange costs per se are desirable.[20]

Policy makers play a central role in any reform. Focusing on the costs of exchange by sector can help to align the incentives of these government decision makers. Some policy makers may find attention to these issues attractive, since they provide a basis for demonstrating progress and getting credit for that progress. If policy makers are recalcitrant, others have a metric by which to judge how they are doing. If the policy makers do not have a monopoly on such information, the costs of their policies and of any corrupt practices are more transparent.

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[19] The argument here is not that all prices should fall with better institutions. As costs of exchange fall and the economy grows faster, prices of some items, like urban land and wage rates, will increase.

[20] This was the experience with de Soto's book, *The Other Path*.

A second recommendation is that more systematic attention be given to importing "technologies" of cooperative group behavior.[21] Groups that cooperate internally can often devise strategies to substitute for ineffective state organizations and to reduce the costs of exchange. For example, consider the difficulties credit markets face when the judicial system does not function well and does not reliably enforce contracts. There are various possible responses to this situation: do nothing, improve the judiciary, or develop substitutes for the state system. Doing nothing means high costs of exchange in the lending market, little credit, and low output. Improving the judiciary is highly desirable but is a long and arduous task beyond the power of most small groups to achieve. The third option is the most practical for groups that manage to cooperate. In São Paolo, Brazil, the garment industry dealt with this problem by creating an office to provide (for a small fee) information on the payment reputation of firms. Any defaults on loans by a firm could be known to all potential creditors. This innovation greatly increased the credibility of borrowers with good past behavior and greatly expanded the credit market.[22]

Another example concerns state monopolies in the export sector. Until a few years ago the main Israeli airline El Al had a monopoly on air freight. Costs were high. Then exporters ended the monopoly by forming their own airline. They organized back hauls to reduce costs. Today, the cost of air shipments to Europe is approximately 1.5 Egyptian pounds per kilo. The comparable cost in Egypt is over twice as much, effectively precluding export of many perishable goods at world competitive prices. Egypt's proximity to Europe does not count for much, given these other export inefficiencies.

5. Conclusions

The argument here is plain. The costs of exchange vary greatly across countries. These costs are fundamentally important in affecting productivity. Therefore, what a country produces and how much it produces depend upon these costs. A country can have outstanding natural resources and an eager workforce, but if the costs of exchange are high there, then specialization, trade, productivity and wages will be low. Conversely, a country with no natural resources, or located far from markets, may nonetheless do very well if the costs of exchange are sufficiently low, for example, Japan and Chile.

This paper suggests a way to characterize the costs of exchange which individuals face in various institutional settings. Across countries and groups, these costs can be calculated. If

[21] Elinor Ostrom's group at the University of Indiana has a program which successfully trains people from all over the world to devise self-sustaining methods of cooperation.

[22] A. Stone, B. Levy, R. Parades, 'Public Institutions and Private Transactions', Washington DC: Working Paper 891, Public Sector Management and Private Sector Development, The World Bank, 1992.

the relatively high costs of telephones, imports, housing and financial markets are characteristic of most sectors in Egypt, this implies a fundamental source of low growth.

What can be done? The proposal here is to encourage individuals, groups and policy makers to focus on these costs. Once collected systematically and publicized, these costs provide a benchmark concerning the costs imposed by particular barriers, by bad laws, poor enforcement, corruption, administrative discretion, and monopoly practices. They are also easily communicated. Increased transparency here raises the likelihood that both the terms of debate and the incentives of political decision makers will be altered.

The likelihood of successful policies will be increased if outcomes are measured clearly, quickly, at moderate cost, and if these measurements are readily accessible to interested parties. At any level of policy, clearer measurement of outcomes makes possible better course correction and a more informed electorate.

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