

INSTITUTIONS FOR GROWTH: A ROADMAP FOR PAKISTANI REFORMS

Dr. Ali Hasanain



ABOUTEAG:

The Economic Advisory Group is an independent platform of individuals drawn from economics, policy and the private sector. The EAG deliberates on Pakistan's economic policies regularly and shares its views with the public and government. It was formed in January 2021, under the auspices of Prime Institute, an independent think tank, which serves as its secretariat.

Author:

Dr. Ali Hasanain (Lahore University of Management Sciences)

All rights reserved.

No part of this book may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval system, without permission in writing from the author (hasanain@lums.edu.pk).

Published by:

Prime Institute
© Prime Institute

Disclaimer:

The printing of this publication is supported by Friedrich Naumann Foundation for Freedom Pakistan. The views expressed in this document do not necessarily represent the views of Friedrich Naumann Foundation for Freedom.

Number of copies: 500

Published in: December 2022 **ISBN:** 978-969-9824-19-7

For Inquires:

Prime Institute Office 305, 3rd Floor, Imperial Square, E11/2 Markaz, Islamabad 44000-Pakistan

Tel: +92 (51) 8314339

Website: www.primeinstitute.org

ABSTRACT

This brief builds on the Economic Advisory Group (EAG)'s Vision Document by laying out the key public institutions and reforms that need to be undertaken in service of enhancing the country's international competitiveness and productivity through better, market-based resource allocations. It argues that internal security, property rights, and contracts enforcement through a reliable policing and court system are essential to building efficiency-enhancing markets. In addition, the country needs to enhance subnational governance by devolving revenue mobilization and creating a more competitive bureaucracy. Finally, Pakistan must increase the amount and efficiency of its education spending.

INTRODUCTION

The EAG Vision document describes a broad direction that Pakistan's economic reforms must take, clearly arguing that the key question policymakers have to ask is how the economy can move from less productive to more productive activities. It pays attention to Pakistan's flagging scores on the Economic Complexity Index (ECI), and suggest that in order to grow; the country has to gain new productive capabilities by integrating into regional and global markets, and by revisiting pricing regimes to open the economy up. The core argument made is that greater reliance on market (price) signals will in general help us grow.

In this note, we revisit and extend the arguments laid out in our Vision document. We ask: what are the institutional pre-conditions for efficiency-enhancing markets? When will markets fail, and what key areas must the public sector improve delivery in?

In the past twenty-five years, Pakistan has seen about five acute macroeconomic crises. Its currency has lost three quarters of its value relative to the US Dollar, and it has struggled to build foreign exchange reserves. The broad contours of this chronic crisis are well established: the country has prioritized importsubstituting industries producing final goods for domestic consumption over export-promotion; successive administrations have spent reserves to maintain a stronger currency than warranted by our balance of payments; and governments have borrowed unsustainably to finance current consumption.

This poor management of the economy has gone hand in hand with the neglect of the whole gamut of state institutions: from tax and utility bill collection to universities to state-owned enterprises to policing to public schools. This erosion has not merely reduced law abidance in general, but created instability and decline in the economy's productive capacities. Resultantly, any effort to strengthen the Pakistan economy today must simultaneously work to improve a range of the country's institutions.

The rest of this note proceeds as follows. In the next section, we lay out the argument for why markets are considered an especially good way to allocate an economy's resources. Next, we describe the underlying institutions that are necessary for markets to work effectively, and that are often implicitly assumed to function well. Finally, we describe lessons from markets that governments can apply to non-market institutions to enhance economic productivity.

WHY MARKETS?

Proponents of free markets argue that - left to their own devices - markets have an inherent tendency to move towards efficiency. This tendency arises because market participants - motivated by self-interest seek to satisfy society's needs as signaled through market demand. An oft-quoted observation of Adam Smith's is that 'it is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest'. He also observed that an 'invisible hand' guides individuals to promote societal interests through the pursuit of their own interests. This metaphor has been called 'the very center of Western economic thinking'. The first fundamental theorem of welfare economics formalizes Smith's intuition, stating that markets allocate society's resources perfectly, provided market participants are perfectly informed, able to transact without cost on all things, and behave competitively.

This literature encapsulates powerful insights sometimes lost on planners: disaggregated systems can create efficiency because private market participants typically have more information about their circumstances than others do; traders in a market are usually better motivated than decision-makers whose decisions don't impact their bottom-lines; the ability of either buyer or seller to walk away from a trade and find an alternative trading partner means that voluntary exchanges in a market create win-win scenarios for both buyers and sellers, typically lifting society as a whole; and as long as new buyers and sellers are free to enter a market, and old ones free to leave, the market allocation of resources is typically the most productive way to organize production.

Thus the 'Washington Consensus' includes, inter alia, an emphasis on privatization and the removal of controls on international trade and financial markets, and the deregulation of the private sector.³

However, the key is ensuring that markets are truly well-functioning. This means paying attention to different ways in which market failures arise. These include, most notably: barriers to market participation; the creation of externalities — damages or benefits to third-parties; a lack of sufficient competition; and through a set of problems arising due to incomplete or asymmetric information.

Policymakers also need to consider inequality. Markets pay attention to demand backed by an ability to pay. In a country like Pakistan, where half our children sleep hungry at night, broad swathes of the population cannot sufficiently express needs through markets. Not only this, when people facing poverty (and other forms of scarcity) engage in economic decisions, there is evidence that they make worse decisions than when their financial stress is alleviated, and even see a temporary drop in measured IQ levels during such times.⁴

Policymakers in a developing country like Pakistan's need to create a judicious balance between developing more efficient markets and raising productivity on the one hand, and constantly studying and correcting market failures on the other. They also need to establish robust social protection programs. While such programs are essential however, they are beyond the purview of the rest of this note.

Policymakers concerned with the institutional foundations of markets need to recognize that while the Washington Consensus notes the importance of property rights, the legal and institutional underpinnings necessary to ensure that markets function well have been – relatively speaking – neglected.

^{1 (}Smith, 1776)

² (Buchanan, 2002)

^{3 (}Williamson, 1994)

^{4 (}Mani, Mullainathan, Shafir, & Zhao, 2013)

INSTITUTIONS FOR GOOD MARKETS

Adam Smith, the father of Economics, wrote in 1755 that: 'Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things.' Perhaps because Western economists lived in societies that had already established peace and justice, these underpinnings of a society (taxation excepted) were neglected in Economics until the Twentieth Century.

Over time, the rule of law has gone from being implicitly assumed to being explicitly emphasized, through the writings of - for example - Nobel Laureates Hayek⁶, Arrow⁷, North⁸, and Ostrom⁹. It is now well understood in the Economics profession that the efficiency of market allocations assumes public order, secure property rights, and strong contract enforcement.

Security of Life

Establishing the Security of Life – or public order – is necessary for at least two key reasons. First, establishing the state's writ or monopoly on violence is foundational to securing other rights. Second, a more secure society is less likely to see public disorder, reducing costly economic uncertainty.

In 2022, Pakistan ranked 129th of 140 countries in the World Justice Project's Rule of Law Index. However, in the sub-category of Order and Security, the country ranked second worst – better only than Afghanistan. ¹⁰ South Asia as a whole performs poorly in this domain, but out of fourteen sub-categories related to Civil and Criminal Justice, Pakistan performs worse than the region's average on nine.



This lack of security and justice is in part due to gaps in the country's judicial system. However, the rule of law has also been impacted by conflicts and worsened by easy access to arms. Over the past decade, violent deaths in Pakistan had spiked far above already high historical levels. The good news is that this unrest has been substantially reduced by the country's successful anti-terrorism efforts, but Pakistan remains more violent than key comparators.

⁵ As quoted by Cannan in his introduction to Smith (1776a)

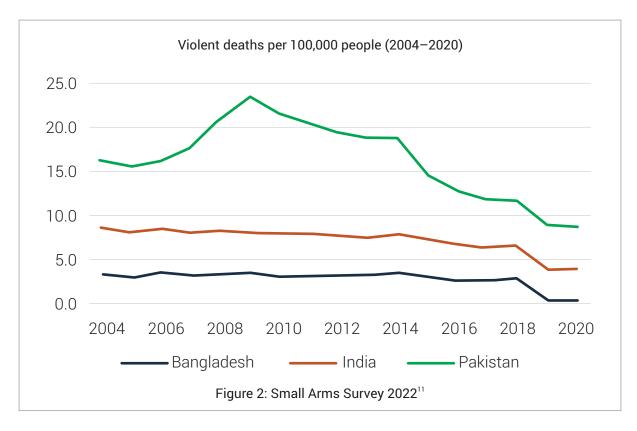
⁶ (Hayek, 2020)

^{7 (}Arrow, 1972)

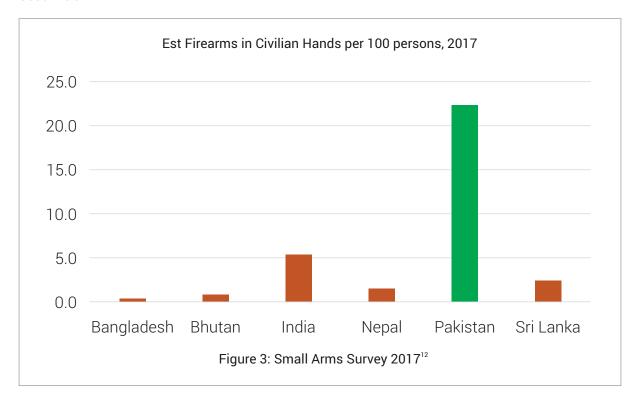
^{8 (}North, 1990)

⁹ (Ostrom, 1998)

^{10 (}World Justice Project, 2022)



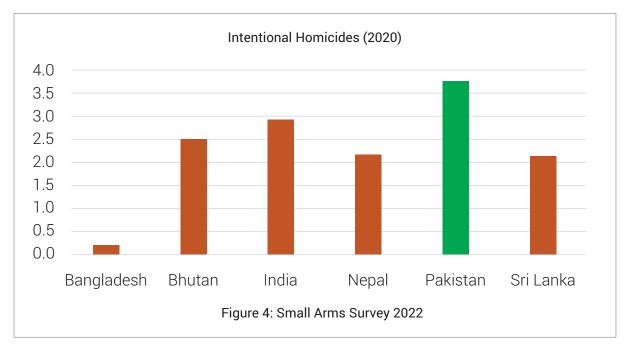
Porous borders and decades of cross-border conflict have meant that the prevalence of firearms in Civilian hands in Pakistan is now estimated to be more than twice the global average, and far worse than the rest of South Asia.



¹¹ (Small Arms Survey, 2020a)

^{12 (}Small Arms Survey, 2020b)

Whether because of this higher prevalence of weapons or other issues, Pakistan today is significantly less successful than the rest of South Asia in providing security of life to its residents.



This lack of security can affect economic outcomes in at least four ways. First, it is hard to conceive of secure property and well-enforced contracts in an environment where individuals can be killed easily. It is not uncommon for financial or property-related disputes to escalate into physical violence, which undermines how secure market participants will consider local property rights and contract enforcement to be. We will discuss the importance of secure property and contracts further below.

Second, violence brings direct economic costs. A study of the impact of violence in Kenya illustrates the impact that insecurity can have on economic matters. ¹³ Researchers studying the relationship between farmers and flower distributors closely observed major violence that erupted in 2008 due to a contested presidential election; about 1,200 people were killed and thousands more displaced. The economic impact of this wave of violence was severe: exports from affected regions dropped 38 percent, and the estimated economic loss from a month of violence was one percent of GDP.

Third, markets respond to higher country or region risk by increasing insurance premiums, moving investments away, or incurring circumventing costs. In the Kenya flower market described above, flower exporters responded before the next elections in 2013 by increasing shipments (in a suboptimal way) beforehand. Such circumvention requires producers to deviate from optimal production and distribution patterns if they anticipate that violence is possible again. External investors understand this. In his 2006 memoir, In the Line of Fire, the former Pakistani dictator Pervez Musharraf narrated the advice he received from Chinese Premier Zhu Rongji: 'Investors, he said, are like pigeons. When a government frightens them with poor decisions, they all fly off together. When the government improves its policies to attract them back, they return only one by one.'14

Finally, violence can impact investment decisions, and thus exacerbate macroeconomic instability. Even small changes in macroeconomic stability can create large effects. One study estimated that a one

^{13 (}Ksoll, Macchiavello, & Morjaria, 2021)

^{14 (}Musharraf, 2006)

standard deviation improvement in macroeconomic stability would lead to a 0.7 percentage point improvement in a country's growth rate, causing income per capita to be 23% higher within a generation, compared to a scenario without such improvements. ¹⁵ Of course, such an effect also works in reverse. It is hard to escape the conclusion then that Pakistan has suffered greatly by failing to provide security to its population. On the bright side, there are clear economic dividends from making progress on internal security.

Security of Property

The legal institution of property is at the heart of a market economy. Property rights are a bundle of privileges over an asset, inter alia: the right to consume or deploy an asset to earn income ('use rights'); sale, gift or bequest ('transfer rights'); or to contract in rent, mortgage, lend or lease agreements.

Property rights determine the expectations market participants can hold about whether they will retain control of, and be able to benefit from the property they hold. It therefore affects both their investment and consumption decisions.

Besley and Ghatak¹⁶ observe the empirical consistency that countries that are richer have less property expropriation risk and better property registration than poorer ones. Why might this be so?

Weak property rights make it less attractive for firms to reinvest their profits or retained earnings, because these firms are uncertain about whether they will benefit from the fruits of their investments.¹⁷ This dynamic can be observed across sectors and contexts. For example, farmers in Ghana have been observed to be more willing to leave their farmland fallow (thus increasing future fertility) when they are assured that they will keep control of that piece of land in subsequent crop seasons.¹⁸ Conversely, improving land title improves investments and household outcomes.¹⁹

When investments are less valuable on the margin, a shift of spending from investments towards consumption is also more likely. Pakistan's aggregate savings rate is famously low²⁰, and has been repeatedly cited by economists as an important reason for the country's inability to increase economic growth.

Distortions observed at the macroeconomic level are often symptoms of underlying institutional failings.²¹ While we cannot definitively conclude that weak property rights are the proximate or most salient cause of these low rates, it is likely that institutional improvements that improve stability and make asset owners more secure will contribute to an improvement in this rate.

Finally, secure property also means the absence of arbitrary and unfair taxation. Presently in Pakistan, the Agriculture and Industries sectors generate broadly equivalent income, yet agriculture pays practically no taxes, while industries pay nearly 70% of the country's total tax collection. The Services sector is about three times larger than Industries, but pays less than half the taxes.²² Our tax code therefore disincentivizes structural transformation. It also provides a claim for industrial businesses to seek concessions elsewhere, distorting market-based allocations further.

^{15 (}Sirimaneetham & Temple, 2009)

^{16 (}Besley & Ghatak, 2010)

^{17 (}Johnson, McMillan, & Woodruff, 2002)

^{18 (}Goldstein & Udry, 2008)

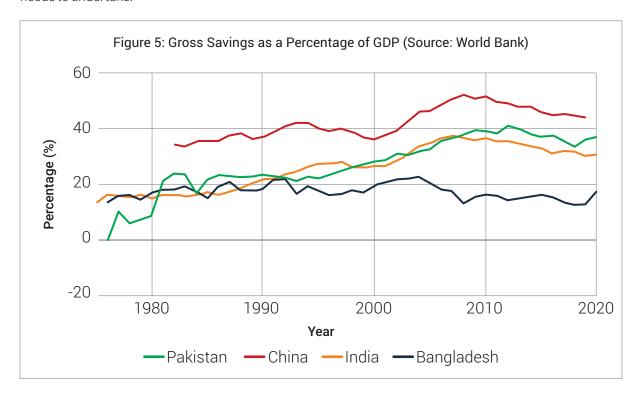
^{19 (}Galiani & Schargrodsky, 2010).

²⁰ (World Bank, 2022)

²¹ (Acemoglu, Johnson, Robinson & Thaicharoen, 2003)

²² (State Bank of Pakistan, 2018)

Taxes need to be simpler, with fewer loopholes and exceptions. People earning similar amounts should be taxed similarly, regardless of how they generate income. This agenda requires a strengthening of taxation authorities too. Much ink has flown on this issue, with little progress to-date, and the tax-to-GDP ratio remains dangerously low. Making the tax code and collection fairer across sectors, industries and income groups is one of the most important, conceptually simple, yet politically challenging reforms that Pakistan needs to undertake.



Security of Contracts

There are strong complementarities between improvements in property rights and the strengthening of contract enforcement. Clear and well-established property rights allow firms and individuals to enter into more meaningful contracts, because property can be contracted without fear of losing final control. In turn, stronger enforcement of contracts allows property to be used more efficiently, making the property more attractive.

Together, secure property rights and enforceable contracts lay the foundations of the corporatization of an economy, by enabling the healthy separation of the ownership of assets from their day-to-day control. While this creates corporate governance problems, 23 it also allows an economy's productivity to increase greatly, as professional managers start taking more decisions and assets are aggregated to unlock economies of scale not accessible by sole proprietorships.

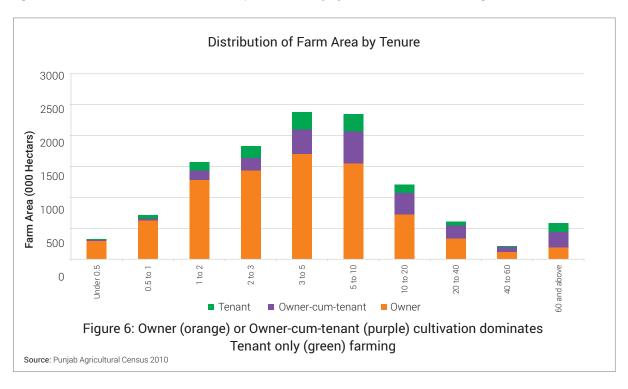
Let us illustrate by considering some inefficiencies that arise due to weaknesses in property rights and contract enforcement in agricultural land.

The principal problem created by weak property rights in this context is that people have to overinvest in keeping de facto control of their land, even where their de jure right to the property is clear. This problem is

²³ (Fama & Jensen, 1983)

exacerbated for smallholders, whose ownership on the ground may not be accurately reflected in formal land records. A tragic manifestation of this insecurity is the reluctance routinely shown by victims of floods, earthquakes, and insurgency operations to leave their land, even under severe stress, because they fear being permanently displaced.

A less dramatic but no less profound consequence of property owners' fears of displacement is that agricultural land in Pakistan is cultivated predominantly by owners even when doing so is inefficient.



Consider two parcels of agricultural land of equivalent size in the US (in Illinois) and Pakistan (in Punjab). One of the most visible differences we see is the high fragmentation of land in Pakistan. This fragmentation has a cost.



The poorest twenty percent of countries in the world have an average farm size of about 4 acres. Pakistan lies within this group. Per the 2010 Punjab Agricultural Census, sixty percent of farms were five acres or less in size, while 90% were twenty acres or less. In contrast, in the richest twenty percent of countries, the average farm size is about 134 acres.

Why does this matter? Larger farms are able to unlock significant economies of scale. Within the US, a farmer on the largest farm reported is estimated to produce sixteen times the output of a farmer on the smallest farm.²⁴ In developing countries too, larger farms are reported to be more productive holding soil quality, form of agriculture and other factors constant.

Imagine that you have an able farmer and a mediocre farmer who each own farms of five acres each. What stops the able farmer from leasing the mediocre farmer's land, freeing the mediocre farmer to become – for example – a carpenter, and allowing the able farmer to extend better farming methods to all ten acres and start unlocking economics of scale?

In Pakistan, poor contract enforcement means that the mediocre farmer cannot set up a profit sharing agreement, because the able farmer's profits may not be properly observable, and the mediocre farmer wouldn't have recourse to a court of law in case the tenant reneges on profit sharing payments. Similarly, the able farmer may be tempted to delay or deny payment on a fixed rent contract. In contexts where property ownership is not disputed, tenancy agreements are still possible, but typically involve entering into a tenancy agreement with repeat tenants — people who the landowner knows, trusts, and can discipline through social sanction if necessary. However, not only are the number of such agreements smaller than efficient, they reduce the competitiveness of the transaction and imply that owners will often settle for lower rents because they are renting to someone trust-worthy. Because well-enforced contracts increase the number of people the owner can trust, they generally increase efficiency. In contexts where formal property rights are insecure, the owner may fear that the tenant will resist returning the farm if it comes under his possession, making tenancy less attractive. Because a well-functioning legal system suppresses these different worries, it enhances economy-wide productivity by improving the efficiency of millions of business choices and transactions.

Improved Financial Markets

Ensuring that property is registered through a formal system of titles creates another significant benefit: the ability to collateralize. To quote Hernando De Soto: "Just as a lake needs a hydroelectric plant to produce usable energy, assets need a formal property system to produce significant (additional) value."

This additional value is created by the ability of the asset owner to submit it as collateral to seek bank credit. Because the collateral creates security for the lender, it lowers the cost of capital for the borrower.

Improving access to loans is especially important for those without an existing ability to borrow from the formal sector: study after study finds that the smallest microenterprises – run by those with few means – see very high returns if their access to capital is improved. These returns have been estimated – in various countries and in both urban and rural settings – to be between 40 and 250 percent annually. This suggests that there are significant productivity gains waiting to be tapped through improved financial access in such contexts, and better property rights can play a role in increasing that access.

²⁴ (Adamopoulos & Restuccia, 2014)

²⁵ (De Soto, 2000)

²⁶ (McKenzie & Woodruff, 2006)

²⁷ (Udry & Anagol, 2006)

²⁸ (Banerjee & Duflo, 2014)

Reforms, large and small

The agenda of improved law and order through better policing and judicial systems can create a variety of benefits for a market-based economy. This agenda must be pursued through a bundle of reforms to land registration systems, improved judicial systems, a review of various laws, such as those around labor and bankruptcy, and a restructuring of financial market regulations. ²⁹ Clearly, this is politically challenging. While pursuing this agenda is urgent and unavoidable if Pakistan wishes to arrest its rapid decline, even policymakers with limited agency can make progress with less ambitious reforms.

There is no replacement for a strong formal law enforcement mechanism, but immediate progress can be made by strengthening buyer-seller networks (to ensure that firm reputation becomes important to protect), creating effective arbitration forums at the industrial cluster level, and strengthening alternative dispute resolution boards at various levels. In forthcoming work, we demonstrate that improving market information available to buyers in a rural market in Sahiwal, Punjab improved the quality of services provided, and created a 275% return on the program's investment. This illustrates two conclusions: first, markets can leave efficiency untapped when they suffer market failures — in our case due to information failures; second, the project of identifying and fixing market failures creates high returns even within the problematic overall settings of present-day Pakistan. The secret sauce is policymaker will and attention.

Other institutions for markets

For markets to work well, they have to be competitive, allow relevant information to flow widely, be regulated to mitigate adverse outcomes, and be complemented by government interventions to ensure social protection and to improve outcomes in contexts where large benefits accrue to third-parties.

Free markets create a burden on regulators to ensure that externalities (benefits and costs outside the transaction) are internalized. They must also work to ensure that moral hazard – the incentive for market participants to exploit transactions in bad faith – are designed out of markets, and that regulations are properly enforced. Thus, the United States for example, has a range of government agencies with an alphabet soup of acronyms – FTC, FDIC, FCC, FAA, OSHA, SEC, EPA, FDA, etc – mandated to correct market failures.

The problem is that governments can both catalyze and destroy improvements in economic productivity through regulations and public-sector interventions. The absence of good regulation has caused regular allegations of fraud and insider trading in Pakistan – from recent allegations of micro-loan sharks to routine allegations of land fraud and insider-trading on the Pakistan Stock Exchange (PSX). There is little enforcement either of safety or environment regulations.

Because the very mandate of regulators is to work against the existing flow of market incentives, regulators face strong incentives for malfeasance. These incentives are not simply an additional cost for businesses, but create market distortions.³¹ Without a state powerful and disciplined enough to resist and police these temptations, additional regulation can be harmful, even when it is motivated by sound market failure rationales and would work well if implemented by a more capable state. The Oxford Professor Lant Pritchett has coined the term 'Isomorphic mimicry' to refer to developing country systems modelled after developed country institutions superficially, that end up not increasing real capabilities and instead

²⁹ (Woodruff, 2001)

^{30 (}Hasanain, Khan & Rezaee, forthcoming)

^{31 (}Shleifer & Vishny, 1993)

become developmental traps.³² Judicious reformers in Pakistan will need to build a regulatory environment in lockstep with improvements in state accountability and capacity. Without this, regulatory institutions have a strong tendency to be captured by vested interests and to create greater inefficiencies.

Perhaps the most important sector that needs state attention is education. The evidence for the salutary impact of better education on an economy and society is unequivocal, and not necessary to repeat here.

MARKET LESSONS FOR NON-MARKET INSTITUTIONS

Economic reforms require a whole-of-economy focus on productivity improvements. This means that the public sector must not only improve the functioning of markets, but also change how it works. Although public sector work cannot simply be guided by market incentives, the government can seek to realize a crucial virtue of markets.

Markets work well when they are competitive. The more competition buyers or sellers face, the less likely that a transaction will generate what economists call economic rents – or money given to a party to the trade over and above its requirements. Similarly, governments are more likely to increase their productivity when they create internal competition where possible.

Greater competition would enhance the public sector's productivity in at least three contexts. First, there is currently little competition between bureaucrats based on outcomes delivered or other performance metrics. This naturally reduces the incentives civil servants have to upgrade their competence.³³ This can directly be improved by creating stronger accountability systems. However, it can also be improved by linking bureaucrat pay to performance.

Second, Pakistan's subnational governments are run by a highly centralized bureaucracy. Different regions do not compete. This is in contrast to for example, China, where decentralized revenue collections and expenditures have allowed mid-level bureaucrats to monetarily benefit from improving the business environment of the region for which they are responsible.³⁴ The project of decentralizing Pakistan's government is similarly likely to pay large productivity dividends.

Finally, where the public sector either produces output directly (through State Owned Enterprises, or SOEs), or is the dominant procurer of output from private firms (such as is often the case in defense or road construction industries), it is important for the government to discipline these economic transactions through engineering competition into the system. This can be done by creating 'orderly competition' – a proactive balancing of capabilities in multiple publicly-owned companies competing with one another for government contracts. This is a practice followed successfully by the Chinese governments in managing the subsidiaries of its large SOEs.³⁵ Alternatively, for procurement contracts with private firms, the government can create 'tournaments' such as those arranged in the US defense sector to select the provider of bespoke products or services (as is perhaps most saliently seen in weapon system 'fly-offs').³⁶ This creates healthy competition between public-sector suppliers as well.

Whatever the institutional design chosen or context, the maxim that competition creates competence, or productivity is a good one for governments to learn from markets.

^{32 (}Andrews, Pritchett & Woolcock, 2017)

³³ (Husain, 2018)

³⁴ (Ang, 2020)

^{35 (}Chan, 2022)

³⁶ (Schwabe, 2020)

CONCLUSION

The package of economic reforms that Pakistan needs includes dealing with macroeconomic issues (such as the long-standing twin deficits of our external and public sectors), improving sectoral efficiencies, and undertaking structural reforms at the market level. This will require a clear focus on increasing productivity throughout the economy by making market and non-market institutions more competitive. In part this will come through the liberalization of trade. In part it will come by reforming internal institutions such as the bureaucracy and State-Owned Enterprises and creating a state that delivers better outcomes for its people.

While Pakistan's trade and macroeconomic environments need urgent structural reforms, good markets remain a key institution for improving productivity and putting the country on the path of sustained growth. Establishing the rule of law, creating effective policing, and delivering justice through a well-functioning court system will deliver profound dividends to economy and society alike.

BIBLIOGRAPHY

Acemoglu, D., Johnson, S., Robinson, J., & Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: volatility, crises and growth. *Journal of monetary economics*, 50(1), 49-123.

Adamopoulos, T., & Restuccia, D. (2014). The size distribution of farms and international productivity differences. *American Economic Review, 104*(6), 1667-97.

Andrews, M., Pritchett, L., & Woolcock, M. (2017). Looking like a state: The seduction of isomorphic mimicry. *Building state capability:* evidence, analysis, action, 29-52.

Ang, Y. Y. (2020). China's gilded age: The paradox of economic boom and vast corruption. Cambridge University Press.

Arrow, K. J. (1972). Gifts and exchanges. Philosophy & Public Affairs, 343-362.

Banerjee, A. V., & Duflo, E. (2014). Do firms want to borrow more? Testing credit constraints using a directed lending program. *Review of Economic Studies*, 81(2), 572-607.

Besley, T., & Ghatak, M. (2010). Property rights and economic development. In *Handbook of development economics* (Vol. 5, pp. 4525-4595). Elsevier.

Buchanan, M. (2002). Wealth happens. Harvard Business Review, 80(4), 49-54.

Chan, K. (2022). Inside China's state-owned enterprises: Managed competition through a multi-level structure. *Chinese Journal of Sociology*, 2057150X221123388.

De Soto, H. (2000). The mystery of capital: Why capitalism triumphs in the West and fails everywhere else. Basic books.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. The journal of law and Economics, 26(2), 301-325.

Galiani, S., & Schargrodsky, E. (2010). Property rights for the poor: Effects of land titling. *Journal of Public Economics*, 94(9-10), 700-729.

Goldstein, M., & Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of political Economy*, 116(6), 981-1022.

Hasanain, A., Khan, M. Y., & Rezaee, A. (forthcoming). No bulls: Experimental evidence on the impact of veterinarian ratings in Pakistan. *Journal of Development Economics*

Hayek, F. A. (2020). The constitution of liberty: The definitive edition. Routledge.

Husain, I. (2018). Governing the ungovernable: Institutional reforms for democratic governance. Oxford University Press.

Johnson, S., McMillan, J., & Woodruff, C. (2002). Property Rights and Finance. American Economic Review, 92 (5): 1335-1356.

Ksoll, C., Macchiavello, R., & Morjaria, A. (2021). Guns and roses: Flower exports and electoral violence in Kenya. *Global Poverty Research Lab Working Paper*, (17-102).

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. Science, 341 (6149), 976-980.

McKenzie, D. & Woodruff C. (2006). Do Entry Costs Provide an Empirical Basis for Poverty Traps? Evidence from Mexican Microenterprises. *Economic Development and Cultural Change* 55(1):3-42.

Musharraf, P. (2006). In the line of fire: A memoir. Simon and Schuster.

North, D. C. (1990). Institutions, institutional change and economic performance. Cambridge university press.

Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action: Presidential address, American Political Science Association, 1997. *American political science review, 92*(1), 1-22.

Schwabe, D. (2020). A Complete History of US Combat Aircraft Fly-Off Competitions: Winners, Losers, and What Might Have Been. *Air & Space Power Journal*, *34*(1), 93-94.

Shleifer, A., & Vishny, R. W. (1993). Corruption. The quarterly journal of economics, 108(3), 599-617.

Sirimaneetham, V., & Temple, J. R. (2009). Macroeconomic stability and the distribution of growth rates. *The World Bank Economic Review*, 23(3), 443-479.

 $Small\ Arms\ Survey.\ (2020a).\ Global\ Violent\ Deaths\ (GVD).\ \underline{https://smallarmssurvey.org/database/global-violent-deaths-gvd}$

 $Small\ Arms\ Survey.\ (2020b).\ Global\ Firearms\ Holdings.\ \underline{https://www.smallarmssurvey.org/database/global-firearms-holdings}$

Smith, A. (1776a). An Inquiry Into the Nature and Causes of the Wealth of Nations (Cannan Ed.), Vol. 2. Online Library of Liberty.

Smith, A. (1776b). An inquiry into the nature and causes of the wealth of nations: Volume One. London: printed for W. Strahan; and T. Cadell, 1776.

State Bank of Pakistan. (2018). State Bank of Pakistan Annual Report 2017-2018.

Udry, C. & Anagol S. (2006) The Return to Capital in Ghana. American Economic Review 96(2): 388-93.

Williamson, J. (1994). The political economy of policy reform. Peterson Institute.

Woodruff, C. (2001). Review of De Soto's The mystery of capital. Journal of Economic Literature, 39(4), 1215-1223.

World Bank (2022). World Bank Open Data Gross savings (% of GDP) - Pakistan, China, India, Bangladesh. https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS?locations=PK-CN-IN-BD

World Justice Project. (2022). Rule of Law Index Pakistan Country Profile 2022. https://worldjusticeproject.org/rule-of-law-index/country/2022/Pakistan/OrderandSecurity/





Office 305, 3rd Floor, Imperial Square, E11/2 Markaz, Islamabad 44000-Pakistan Tel: +92 (51) 8314339

www.primeinstitute.org