



UNITED NATIONS
UNIVERSITY

UNU-WIDER

World Institute for Development
Economics Research

Working Paper No. 2012/108

Economic Governance

Improving the economic and regulatory
environment for supporting private sector
activity

Colin Kirkpatrick*

December 2012

Abstract

This paper reviews the state of knowledge on the effectiveness of donor interventions aimed at improving the regulatory environment for private sector development in developing countries. Where regulatory reform is undertaken, the expectation is that there will be improvements to economic and welfare outcomes. By providing a review of the evidence on the results of regulatory reform, the paper aims to increase understanding of the types of interventions that are likely to have a positive impact on private sector development in developing countries.

Keywords: economic regulation; regulatory reform; impact evaluation; private sector development

JEL classification: L51, O19

Copyright © UNU-WIDER 2012

* University of Manchester, email: Colin.Kirkpatrick@manchester.ac.uk

This study has been prepared within the UNU-WIDER project 'ReCom–Foreign Aid: Research and Communication', directed by Tony Addison and Finn Tarp.

UNU-WIDER gratefully acknowledges specific programme contributions from the governments of Denmark (Ministry of Foreign Affairs, Danida) and Sweden (Swedish International Development Cooperation Agency—Sida) for ReCom. UNU-WIDER also gratefully acknowledges core financial support to its work programme from the governments of Denmark, Finland, Sweden, and the United Kingdom.

ISSN 1798-7237 ISBN 978-92-9230-574-1

The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

www.wider.unu.edu

publications@wider.unu.edu

UNU World Institute for Development Economics Research (UNU-WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Typescript prepared by Janis Vehmaan-Kreula at UNU-WIDER

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

1 Introduction

Private sector development (PSD) has long been seen as a *sine qua non* for economic growth and poverty reduction in developing countries. ‘Private sector development’ is a broad concept, however, encompassing a wide range of strategies, institutions and actors. It covers both formal and informal sectors; micro, small, medium and large enterprises; business associations and financial institutions; and non-profit organizations. The private sector also includes households who operate as consumers of goods and services and as suppliers of labour.

Donors have supported a wide range of interventions under the overall umbrella of private sector development. At the macro level, assistance has been directed at establishing an overall business environment that fosters opportunities for investment, entrepreneurship and job creation. At the meso level, donor initiatives have been aimed at improving the functioning of labour and capital markets. At the micro level, private sector support has been targeted at particular sectors or clusters of individual enterprises. The relative importance attached to these various levels of intervention has varied between donors and over time, reflecting shifting priorities between establishing ‘a level playing field’ for PSD, or targeted interventions aimed at supporting particular sectors or economic actors.¹ Currently, much of the donor assistance to PSD is directed towards building complementary partnerships between the public and private sectors, where responsibility for delivery is delegated to civil society and private sector organizations.

‘Market failure’ is one of the distinguishing characteristics of underdevelopment and market imperfections are evident, to varying degrees, in all developing countries. These market failures occur when there are appreciable externalities, missing or incomplete markets, information asymmetries or public good attributes in economic transactions. Regulation is intended to correct these market failures and thereby add to economic efficiency and growth. In addition, regulation is needed where market transactions are perceived to lead to socially unacceptable income and wealth distributions, or where there is an expectation that the public should have access to certain goods and services (e.g. health care and education) irrespective of ability to pay.

While the case for regulation is not disputed, the *optimal* level of regulation is one of the most contentious issues in development policy, with critics arguing that regulation often interferes with the efficiency of the market, and advocates arguing that well-designed regulations not only make markets more efficient but also help ensure that market outcomes are more equitable. It is hardly surprising, therefore, that ‘regulatory reform’ has been a constant and prominent part of donors’ PSD programmes. The aim of regulatory reform assistance has been to improve the quality of regulation affecting the private sector. For some donors, the focus has been on reducing the costs to business of existing regulations, through administrative simplification and reduction in regulatory compliance costs. For others, regulatory reform has concentrated on achieving ‘better regulation’ by improving the quality of new regulations through improved procedures for drafting of legislation. Others have

¹ As seen, for example, in the ongoing debate on the benefits and costs of an interventionist approach to industrial and trade policy in developing countries (Lin 2011).

concentrated on strengthening the human and institutional capacity for regulatory management as part of broader public sector reform programmes.

This paper reviews the state of knowledge on the effectiveness of donor interventions aimed at improving the regulatory environment for private sector development in developing countries.² The term ‘regulatory reform’ is used in two ways. The first is ‘regulatory policy’ which covers a specific regulatory intervention, or to a set of regulatory interventions.³ Typically, the results of regulatory policy are assessed in terms of effectiveness and efficiency. Effectiveness relates to the achievement of planned objectives and goals; efficiency relates to the achievement of these goals at least cost. The second way in which the term ‘regulatory reform’ is used is to refer to the governance dimension of regulation (IFC 2008). There is a broad consensus that these principles of good governance encompass proportionality, the regulation should be appropriate to the size of the problem it is intended to address; targeting, the regulation focuses on the problem and does not cause unintended consequences in other areas of the economy or society; consistency in decision-making, to avoid uncertainty; accountability for regulatory actions and outcomes; and transparency in decision-making (Parker 2002).

The review is based on evidence drawn, for the most part, from peer-reviewed research literature. The purpose is to increase our understanding of which interventions have had a positive impact on private sector development in developing countries. Where changes to regulation are introduced the expectation is that there will be improvements to economic and welfare outcomes. The challenge therefore, is to ensure that the benefits from regulatory reform are both achieved and outweigh any costs imposed. Donors and their developing country partners increasingly demand robust and credible evidence on the effectiveness of aid programmes which can be used to inform future policy formulation and implementation. This demand from policy makers for reliable answers to the ‘what’ and ‘why’ questions of successful development interventions, is reinforced by the pressure on donors to show that spending not only generates positive development outcomes but also represents value for money. As a result, evaluation of policy impact and effectiveness in the area of private sector development is a priority for donors and international development institutions alike.

There are six sections to the paper. Section 2 considers the methodological and practical challenges in evaluating the impact of donor supported regulatory reforms aimed at supporting private sector development. Section 3 reviews the evidence on the impact of regulatory policy on macro-economic performance and on enterprise sector development. Section 4 reviews the evidence on the impact of regulatory governance reform in terms of regulatory institutional independence and the use of regulatory impact assessment (RIA). Section 5 presents the key findings. The final section provides the summary and conclusions.

² Evidence on the impact of regulatory policy in OECD countries is reviewed Parker and Kirkpatrick (2012).

³ OECD (2010) defines a ‘development intervention’ as ‘a general term for any activity, project, programme, strategy, policy, theme, instrument, modality, institutional performance etc. aimed to promote development’. Regulatory interventions often take the form of legal measures, but can include measures aimed at voluntary changes in behaviour through education and information or fiscal policy.

2 Evaluating the impact of donor assistance for regulatory reform

The aim of the study is to assess the results of donor-supported regulatory reforms in developing countries. Has regulatory reform contributed to private sector development? If so, can we explain how and why this contribution occurred?

There is no single body of theory in the literature dealing with the precise effects of particular regulation policies. In general, the economics literature appraises regulation by drawing on broad economic principles to do with competitive and non-competitive markets, sometimes referred to collectively as neoclassical economics. A common point of departure for discussing the theory of regulatory impact is to consider how regulatory reform might affect enterprise behaviour and economic activity. The main causal link is from regulation to enterprise behaviour and its effect on productivity, investment and economic growth (Crafts 2006; SAGPA 2010).

The impact of regulation on productivity, investment and growth can be positive or negative. Regulations that reduce uncertainty will lower the costs of doing business and encourage investment and innovation. Similarly, regulation of uncompetitive market practices will allow greater competition in the market and increased market entry and exit. On the other hand, regulation can have negative impacts on a firm's behaviour and productive activity. The regulatory 'burden' is sometimes measured as the direct administrative costs and other compliance costs incurred by businesses in meeting regulatory requirements. However, indirect costs imposed on business and the wider economy by regulations may be much higher than the compliance costs. If regulation reduces a company's cash flow or increases uncertainty of future cash flows, then investment can be adversely affected. If regulation increases fixed costs of establishing a new business, or acts as a barrier to market entry, then entrepreneurship, innovation and competition are adversely affected, with potentially damaging effects on economic growth.

In practice, regulatory policy is embedded in political processes and institutional structures and the outcomes of regulatory reform are inevitably affected by these non-economic factors. The passage from regulatory reform to economic impact will often involve a complex set of inter-related variables, each of which can influence the final outcome, making it difficult to isolate the fraction of the observed impact that is due to the initial regulatory intervention. Causal chain analysis is a technique for explaining the way in which a regulatory intervention results in an economic impact. A range of different techniques can be used in applying causal chain analysis to regulatory reform. Collectively, these techniques are referred to as impact evaluation.⁴ In practice, the method chosen will depend on a variety of factors, including data availability, the scale and complexity of the intervention, the resources available for evaluation, and the level of detailed evidence that policy makers and other stakeholders require on the results and consequences of the intervention.

⁴ Impact evaluation is about 'understanding what works in development, under what circumstances, and why' (World Bank 2009). Impact evaluation tries to 'prove' a causal link between the intervention under examination and the final impact on welfare. Testing for causality involves estimating the counterfactual and estimating the difference between the actual and the (hypothetical) counterfactual impacts. For a more detailed discussion of the application of impact evaluation to development assistance programmes, see DFID (2012); OECD (2010); DCED (2010); World Bank (2009).

Regression analysis is the most widely used method of impact evaluation of regulatory interventions. Econometric methods can be used for modelling the relationship between one dependent variable (e.g. GDP growth) and other, so-called independent or explanatory, variables (e.g. labour input, investment and technology) that can be expected to cause changes in the dependent variable. An additional explanatory variable reflecting a regulatory change can be added to the independent variables. Regression analysis has the advantage of enabling the researcher to measure the effect and relative importance of a number of variables at the same time. Validity tests in the form of statistical significance tests can be applied to each variable and to the regression equation as a whole, adding to confidence that the results are robust. Regression analysis does rely, however, on the existence of appropriate data and accurate modelling of the interrelationship between the variables. Unless care is used, results can be statistically significant, yet still mislead about the degree of the effect or even the whole causal relationship.

Regression analyses are often based on panel data, which combines time series data (data over time) with cross-country data (comparing across countries in a particular year). But cross-country heterogeneity can make it difficult to quantify the link between the development intervention and performance on a cross-country basis, particularly where the intervention is context-specific and its effects diminished or enhanced by factors such as the level of effective governance, law and order, corruption etc. within countries.

Currently, considerable attention is being given to the use of experimental approaches in evaluating the impact of development policy interventions (Ravallion 2009; White 2009; Cadot et al. 2011). Randomized controlled trials involve comparing impact variables between units that have been randomly assigned into participant and non-participant (control) groups. The results are then tested for statistical significance.⁵ Semi-experimental methods, including ‘with-without’ and ‘before-after’ techniques, are more widely used but also rely on being able to select two groups that are identical in all respects except for the intervention. Experimental methods of impact evaluation typically use case study evidence which has the advantage of contextualizing the cause and effect variables. The difficulty is in generalizing beyond the single case.

There have been relatively few studies on the impact of the governance aspects of regulatory reform. Adherence to the principles of open government, including transparency, accountability and consultation, ‘enables public scrutiny, gathering facts from those affected by proposals, safeguards against corruption and promotes citizens’ trust in government through increased transparency and public participation’ (OECD 2011: 15). The underlying logic is that adherence to the principles of open government will contribute to better regulation and mitigate important constraints to economic performance, by, for example, reducing the risk of regulatory failure, improving policy consistency, and lowering corruption and vulnerability to capture by particular interest groups. Where evaluation studies have been carried out on the impact of regulatory governance the evidence is typically gathered from survey or interview information on agents’ perceptions of impact.

Data limitations are a further constraint to evaluation of donor assistance to regulatory policy. Unfortunately, regulatory reform is not used as a separate category in reporting donor assistance, and it is not possible, therefore, to test directly for the impact of aggregate donor

⁵ Shaffer (2011) provides a detailed discussion of the limitations of RCT in development evaluation.

assistance for regulatory reform.⁶ The World Bank's Private sector database (<http://data.worldbank/topic/private-sector>), for example, states that 'Data on the private sector and trade are from the World Bank Group's Private Participation in Infrastructure Project database, Enterprise Surveys, and Doing Business Indicators, as well as from the International Monetary Fund's Balance of Payments database and International Financial Statistics, the UN Commission on Trade and Development, the World Trade Organization, and various other sources'. The OECD DAC statistics on development assistance flows do not provide separate statistics on donor support for regulatory reform and/or private sector development.

A limited amount of evidence on the impact of donor assistance for regulatory reform can be extracted from reports on individual projects or programmes. The Donor Committee for Enterprise Development has organized a number of conferences (Bangkok 2006, Accra 2007, Bangkok 2012) at which the results of country programmes have been reported by experts and policy makers.⁷ A review of 43 papers presented at the 2006 and 2007 meetings that dealt with regulatory reforms showed that 26 of the papers concluded that a specific reform was successful in improving the environment for business performance.⁸ However, 14 of the papers provided no evidence to support the claim that specific reforms had been successful. Of the twelve papers that did present evidence only half gave evidence of impact on final economic outcomes. Of the six papers that presented evidence of impacts, there was little or no evidence of a causal relationship between the reform and business impacts. Having reviewed the available evidence on donor assisted regulatory reform, it is concluded that 'it is clear that many reformers are over-promising results, or more precisely, promising results without knowing if they are over or under-promising. Evidence linking particular regulatory governance reforms to changes in market performance or to government policy effectiveness is thin in OECD countries and practically absent in developing countries. Even for easier reforms, such as cost cutting, the direct evidence is slim' (IFC 2008: 34).

3 Evidence on regulatory policy reform

3.1 Regulatory policy reform and economic performance

As discussed in the preceding section, the economic theory that underlies the case for regulatory reform is based on improving the incentives for investment and productivity gains which together will accelerate the rate of economic growth. We begin, therefore, by summarizing the evidence on the impact of regulatory reform on investment and economic growth. The second part of this section deals with regulatory reform and enterprise sector development.

Much of the quantitative evidence relating to the impact of regulatory reform on macroeconomic performance is based on the panel data provided in the World Bank's *Doing Business* and *Worldwide Governance Indicators* databases. The *Doing Business* database provides annual cross country rankings on ten different components of regulatory burden on business: starting a business, construction permits, employing workers, registering property,

⁶ Unlike aid for trade assistance, for example, where data are available on total donor assistance.

⁷ <http://www.enterprise-development.org>

⁸ This research was carried out as part of the Dutch Ministry of Foreign Affairs-DFID-IFC Better Regulation for Growth initiative in 2008. The main findings are reported in IFC (2008: chapter 5).

getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, closing a business. The *Worldwide Governance Indicators* database provides panel data on six separate indicators of governance: voice and accountability, political instability, governance effectiveness, regulatory quality, rule of law, and control of corruption.

The evidence relating to regulatory reform and investment shows the predicted positive relationship (Box 1). However, the results also indicate that the quality of regulatory governance framework within which the reform policies are implemented, has a significant influence on the investment outcomes.

Box 1: Regulatory reform and investment

Eifert (2009) examines the impact of regulation on investment rates, using both aggregate indicators of regulation and individual regulatory indicators. Particular attention is given to the influence of governance quality on the impact of regulatory reforms. The study uses a five year panel of data from the Doing Business database. Two macro performance indicators are used as dependent variables in the regression analysis: investment rates and factor productivity. The main findings are as follows. First, the incidence of regulatory reform was higher in countries with relatively high levels of initial regulation. Second, when an aggregate measure of regulatory reform is used, there is evidence of positive impacts on investment and economic growth, particularly in countries that are poor and relatively well governed. Third, there is little or no evidence in the full sample of countries of significant responses to changes in individual regulation reform, for example, the costs and administrative delays associated with business registration, contract enforcement, property registration and import/export procedures, or to reforms in labour regulations. Taken together, the results suggest that 'relatively well-managed poor countries stand to gain from a broad push for streamlining regulations and procedures affecting businesses'. However, the empirical results could be partly spurious if governments which enact regulatory reforms simultaneously implement other reform measures that impact on economic performance.

Kirkpatrick et al. (2006) provide an empirical examination of the hypothesis that an effective regulatory governance framework provides regulatory credibility to the private sector and thereby encourages private investment. Using a dataset on private participation in infrastructure projects in developing countries for the period 1990 to 2002, an econometric model is used to estimate the determinants of foreign direct investment in infrastructure. Two variables are used as measures of the quality of the regulatory environment for the infrastructure sector. The first is taken from the World Bank Governance dataset (Kaufmann et al. 2003). A second indicator is used to indicate whether independent regulators were established in the telecommunications and electric power industries. The results show both indicators of regulatory quality to be statistically significant and positively related to the private investment in infrastructure. However, when the independent utility regulation variable and the measure for overall governance are both included in the same equation, the former becomes insignificant, although correctly signed. The failure to detect a strong influence for independent utility regulation, independent of the quality of overall governance, may indicate that investors in infrastructure are more likely to be influenced in their investment decision by the overall governance environment than the existence of an independent utility regulatory authority.

The evidence on regulatory reform and economic growth is also consistent with *a priori* expectations. In general, the studies suggest that there is evidence of a statistically significant and positive relationship between regulatory reform and economic growth (Box 2). However, there are a number of qualifications to this general result. First, it appears to be the case that the quality of regulatory governance and the institutional framework in a country can mitigate the damaging effects of regulatory policy on economic growth, which points to the importance of country-specific factors in affecting the impact of regulation on macroeconomic performance. Second, the level of regulation appears to have a significant effect on economic performance suggesting that there can be a threshold level of regulation below which a reduction in regulatory business costs will have a negligible effect on

economic growth performance.⁹ Third, the correlation between level of income and level of regulation complicates the empirical estimation of a causal link from regulatory reform to economic growth. Taken together, the results suggest that relatively well managed poorer countries can benefit from a broad programme of reform aimed at improving the regulatory framework affecting businesses (Eifert 2009).

Box 2: Regulatory reform and economic growth

Djankov et al. (2006) use the World Bank's Doing Business database to establish the relationship between the burden of business regulations and economic growth. The study uses an aggregate index based on seven components in the database that measure the regulatory burden affecting business.¹⁰ The aggregate index is then used in a regression model based on panel data for the period 1993-2002. The results show a statistically significant negative relationship between the regulatory business burden and economic growth of a country in various specifications of the model. The findings suggest that moving from the worst to the best quartile of business regulation implies a 2.3 percentage point increase in average annual growth.

Haidar (2012) also uses the Doing Business database, but replaces the annual regulatory status variable with a regulatory change reform variable, which measures the total number of regulatory reforms happening in a country over a four year period (2006-10). The regression results show a positive relationship between regulatory reform and economic growth. Controlling for the effect of other economic and institutional variables reduces the size of the coefficient on the regulatory reform variable, but the relationship between reforms and growth remains statistically significant. The results indicate that, on average, business regulation reform is associated with a 0.15 per cent increase in income per capita growth.

Jalilian et al. (2007) use the WGI data to derive a measure of the quality of regulatory policy and governance. A regulatory quality index, which measures the regulatory burden on business, and a government effectiveness index, which measures the quality of public provision, competence of civil servants, and the credibility of government decisions are used as measures of overall regulatory quality. Regression analysis applied to the panel dataset show that the regulatory variables have the expected signs in terms of causation and are statistically significant in all cases. The results are consistent with the hypothesis that regulatory quality has a positive and causal impact on economic growth.

Loayza et al. (2004) provide an empirical estimate of the impact of regulatory policy on GDP growth and volatility in a large sample of developed and developing countries, using cross country regression analysis. The sample covers up to 76 countries in the late 1990s. The authors find a negative causal relationship between economic growth and overall regulation and separately for product market and labour regulation. However, the results for labour market and product market regulation become small as the overall quality of a country's institutional framework improves, suggesting that better institutions help mitigate, and may even eliminate, the adverse impact of regulation on macroeconomic performance. At the world median level of governance, a one standard deviation increase in overall regulation is predicted to lower annual GDP growth per capita by 0.4 percentage points. However, these effects become smaller, and might be eliminated, by a better quality of a country's overall institutional framework.

The Swedish Agency for Growth Policy Analysis (2010) carried out a regression study of the impact of regulatory burdens on economic growth (and other economic indicators, including profitability, investment and entrepreneurship), again using the Doing Business data on different components of regulatory burden. The data cover the period 1970-2010, for all countries included in the Doing Business database. The regression results show a negative correlation between economic growth and the index of overall regulation burden.

⁹ The level of regulation is correlated with level development. This is confirmed by research on the 'lighter regulated OECD countries, where the overall level of regulation is generally lower than in poorer countries, the impact of regulatory reform on growth is negligible' (Crafts 2006).

¹⁰ The components are: starting a business, protecting investors, employing workers (hiring and firing), registering property, enforcing contracts, getting credit and closing a business.

The empirical evidence of a negative relationship between the overall level of regulation and macroeconomic performance provides policy makers with some reassurance that regulatory reform is more likely to do more good than harm. But there is little guidance in this body of literature on the types of regulatory reform policies that have been effective. Indeed, where researchers have disaggregated the measure of regulatory reform into separate policy areas, the results have failed to produce statistically robust evidence on the impact of individual reform measures. Eifert (2009), for example, examines the impact of reform in five separate areas—business registration, contract enforcement, labour laws, property registration and import-export—on investment and economic growth. The regression results do not support the underlying hypothesis that regulatory reforms make a significant contribution to economic growth. The results for investment are all insignificant and in many cases have wrong sign. The results for GDP growth show a similar pattern, leading the author to conclude that ‘overall, the existing data cannot support strong assertions one way or the other about the aggregate impacts of the individual regulations and procedures studied here’ (Eifert 2009: 32). Put simply, the results provide qualified confirmation of the desirability of regulatory reform but offer no guidance on the particular reform measures that are likely to be effective in strengthening economic performance.

In addition, there are sizeable methodological and data problems associated with this body of research investigation. In terms of method, the studies reviewed used econometric regression analyses to identify the statistical significance of the regulatory variable and the economic outcomes under investigation, after allowing for other variables that might impact on the results (control variables). Used appropriately, regression analysis provides statistically validated evidence on the tested hypothesis. Nevertheless, there are important caveats about its use. The evidence of a statistically significant relationship between the dependent variable (e.g. regulation) and the independent variable (e.g. GDP growth) does not prove that the causality chain runs from regulation to economic outcomes. It is equally plausible to argue that higher economic growth, for example, encourages lower regulation or that economies performing less well may be more prone to regulating in an attempt to solve problems. Although a number of the studies reviewed attempted to control for causation, it may still be the case that countries with stronger economic conditions invest more in regulatory policy or otherwise create better regulations.

A second caveat relates to interpretation of results derived from panel data, which combines time series data (data over time) with cross-country data (comparing across countries in a particular year). The regressions involved estimating a ‘best fit’ equation to represent the relationship between the dependent (determined) variable and the independent (determining) variables. In reality, cross-country heterogeneity, can make it difficult to quantify the link between regulation and performance on a cross-country basis. This can be expected to be a serious limitation if regulation is context specific and its effects diminished or enhanced by factors such as the level of effective governance, law and order, corruption etc. within countries. These problems are exacerbated when cross-country differences occur over time.

A third set of reservations relates to data adequacy. Sometimes proxy variables are used in the absence of direct measures of regulation, such as of market entry barriers. This is common practice in econometrics in the absence of other, more appropriate, data; but it is essential that the proxy variables are apposite and not just what are available. Particular care needs to be taken with proxy variables for regulatory costs where there is an important distinction to be made between administrative costs—those associated with the provision of

information to stakeholders including government (e.g. completing and submitting forms) — and policy and compliance costs—the costs inherent in meeting the aims of a regulation.

Most studies deal with ‘regulatory burden’ at the economy level, while in practice regulatory policy may be formulated and enforced at the sub-national level. Equally, regulation can be expected to impact differently at the sectoral and industry levels. In particular, most studies being at the economy level fail to distinguish the results for different sizes of businesses. Large enterprises might be expected to be better resourced to comply with regulations than smaller firms and therefore regulation therefore may impact more severely on the latter.

Typically, regulation is treated as a ‘stock’ or quantity, while the main economic effects may well result from the ‘flow’ or changes in regulation. It is quite possible that the problem for business may be less the scale of regulation but rather the frequency with which regulations change. Changes in regulation may be more costly to deal with than existing regulation. Once a business has undergone the ‘set up’ costs of complying with a regulation, removing it may provide little in the way of cost savings. Indeed, if the costs are ‘sunk’, removing them may achieve no cost savings to business. Replacing them with new regulations, intended to be less burdensome, may actually impose a net cost, contrary to the intention. The frequency or regularity with which businesses need to comply with a regulation may be important and this too is not captured in data concerned simply with the quantity of regulation. In other words, understanding the dynamics of regulatory policy requires a more refined approach to regulation than can be extracted from regression analysis.

More generally, the literature focuses on *economic* regulation and economic outcomes. But regulation is intended to improve not just economic welfare, but also social and environment welfare. The concentration upon regulatory costs or ‘burdens’ can therefore provide misleading policy results because the crucial importance of regulations to ‘balanced’ development is ignored. In which case, the results from the empirical studies are at best partial in nature, and do not capture the true welfare effects of regulation and therefore of reducing regulation. As the authors of *Doing Business* acknowledge, the indicators are ‘limited in scope... [and do] not consider the costs and benefits of regulation from the perspective of society as a whole’ (World Bank 2011: v).

To summarize, there are considerable data and methodological challenges to achieving robust empirical results relating to the economic impact of regulatory policy reform in developing countries.

3.2 Regulatory policy reform and enterprise sector development

Entrepreneurship and the growth of the enterprise sector are key drivers for the development of the market economy, and the entry of new businesses can foster competition, employment and economic growth (Klapper et al. 2006; Djankov et al. 2002).

The reform of enterprise registration and licensing procedures has been a significant part of donor programmes for private sector development, based on the belief that complex and time consuming procedures for registering a new business may act as a barrier to the growth of new firms and formal sector development. Common reforms have included the introduction of one stop shops; the use of a fixed registration fee regardless of company size; the separation of registration from licensing regulations; and reviewing procedures to ensure they

still fulfill their intended purpose. The *Doing Business* rankings, for example, provide detailed information on the number of procedures that have to be complied with and the length of time spent on registering a new firm. Over the period 2003-2011, *Doing Business* recorded 349 business registration reforms in 146 countries.¹¹ Globally, the average time to start a business fell from 50 days to 31, the average cost from 89 per cent of income per capita to 36 per cent.

The evidence on the impact of enterprise registration and licensing reform is mixed. The majority of studies have applied regression analysis to cross country or panel data. In general, the results show a positive relationship between registration and licensing reform and various enterprise performance indicators, including, the number of new registrations, size of the formal sector, employment growth and tax revenues (Box 3). However, the results are subject to many of the reservations that were discussed in the preceding section. In particular, robust evidence of a unidirectional causal relationship is often missing, and the influence of other variables may not be fully accounted for.

Country-specific studies may provide greater insight and understanding of the underlying causal relationships between enterprise registration reform and economic outcomes. In Vietnam, the Enterprise Law of 1999 played an important part in liberalizing market forces by simplifying business registration procedures and removed many business licensing requirements. In the five year period following the Enterprise Act, the average number of enterprises registered annually was significantly higher than in the preceding period, resulting in a steady increase in the share of private sector investment in aggregate investment (CIEM 2006). What is less clear, however, is the extent to which the rise in enterprise registrations represented a growth in new enterprises and private sector investment, as compared to a transfer of existing informal enterprises into the formal sector. More detailed research revealed that the approximately 45 per cent of the new registrations had formally been informal entities (household businesses) that had decided to formalize their business operations under the Enterprise Law. It was also found that a significant number of registered enterprises were not operational, either because they were ‘ghost’ enterprises that had never started up in business, or had been unsuccessful and ceased operations (Freeman et al. 2005).

Experimental evaluation methods have been used to analyse the impact of business registration reform in both Mexico (Bruhn 2011; Kaplan et al. 2011) and Sri Lanka (de Mel et al. 2012). In Mexico, the reform of business registration was organized by a federal agency but implemented at the municipal level on a staggered basis. This allowed the authors to use the municipalities in which the reform was introduced later as a control group for the municipalities in which it was introduced earlier, using a difference in differences estimation methodology. The reforms reduced the time required to register at the municipal level from 30 to 2 days for firms operating in specific sectors. Both studies find that the reform succeeded in increasing registrations. However, the studies reach different conclusions as to whether the increase in registrations is due to the formalization of existing businesses or the establishment of new businesses.

In Sri Lanka, a field experiment was conducted to test the potential impact of registration reform on the movement of enterprises from the informal to formal sector. Offering information on the registration process and reimbursement of direct registration costs had no impact on formalization. Offering direct payments equivalent to one half of one month’s

¹¹ Doing Business Report, 2012.

profits led to registration of around one-fifth of the sample firms. The main reasons for not formalizing included issues related to ownership of land and concerns about tax liability, particularly on labour. Follow up surveys of the firms that had registered showed that the majority of firms had not increased their income as a result of formalization.

Box 3: Enterprise registration and enterprise sector development

Audretsch et al. (2006) show how cumbersome regulations and administrative procedures for starting a business are associated with a smaller number of legally registered firms, greater informality and more opportunities for corruption.

Klapper and Love (2010) use a cross country time series panel dataset covering 92 countries on the number of newly registered companies (World Bank Entrepreneurial Snapshots) and data for the Doing Business reports on the cost, time and number of procedures required for registration of new companies, to investigate the impact of enterprise set up costs on the growth of new enterprises. Using regression analysis, they find that barriers to starting a business are significantly and negatively correlated with business density, calculated as the total number of businesses registered as a percentage of the economically active population. For example, the fewer the procedures required to start a business, the greater the number of registered firms. There is also a significant relationship between the cost of starting a business (as a percentage of GNP) and business density. This study also investigates the relationship between the magnitude of reforms and new firm registrations and finds that small reforms (less than 40 per cent reduction in costs, days or procedures required for business registration), do not have a significant effect on new firm creation. They also find that countries with relatively weaker business environments require larger reforms in order to impact new firm growth.

Ciccone and Papaioannou (2007) combine industry level data on employment growth and the growth in the number of establishments with data on the time taken to obtain legal status to operate a business covering 45 countries in the 1980s. The main empirical finding is that in countries where the legal status to establish firms can be obtained more quickly, there is significantly more entry in industries that experience expansionary global demand and technology shifts.

Freeman et al. (2005) analyse a sample of firms that registered under the 1999 Enterprise Law in Vietnam. They show that the number of new registrations in the period following the simplification of registration procedures significantly overstates the number of new enterprises, since enterprises that had previously been operating in the informal sector transferred into the formal registered sector. The registration statistics also overstate the number of active enterprises since enterprises that cease operations are not removed from the register.

Bruhn (2011) and Kaplan et al. (2011) both study a business registration reform in Mexico which reduced the time required to register a business from 30 to 2 days. Both studies find some increase in the number of registrations, although Bruhn concludes the increase is due to new businesses entering the market, whereas Kaplan et al. conclude that the increase is due mainly to the formalization of existing enterprises.

De Mel et al. (2012) conducted a field experiment in Sri Lanka that provided incentives for informal firms to formalize by registration. The results suggest that simply reducing the costs of registration does not result in any increase in registration. The offer of a financial incentive to register led to a modest increase in registrations but the majority of firms chose to continue operating in the informal sector. The perceived benefits of registration are outweighed by the disadvantages of paying taxes and other informal payments to government officers, and problems of having to provide proof of ownership of land on which the firm operated.

To summarize, regulatory reform aimed at the development of the enterprise sector has focused on reducing the costs to business of complying with government regulations for the registration and licensing of enterprises. This is grounded in the belief that burdensome entry

regulations prevent small firms becoming formal and act as a barrier to new firms setting up in business. While there is cross country regression evidence of a positive relationship between the growth of the enterprise sector and the level of business regulation costs, the evidence on the underlying causal relationships is less conclusive. In general, the results of both regression analysis and experimental methods suggest that reducing the costs of registration alone is unlikely to have a major impact on the growth of the formal enterprise sector. Accelerated growth of the enterprise sector requires significant changes in the broader regulatory environment which can shift the balance between the costs and benefits of operating in the formal sector.

4 Evidence on regulatory governance reform

The term ‘governance’ has been used in the literature to cover different dimensions of the quality of public institutions. According to Douglass North’s widely cited definition, the term ‘institution framework’ refers to the set of informal and formal ‘rules of the game’ that constrain political, economic and social interactions (North 1990, 1991). From this perspective, a ‘good’ institutional environment is one that establishes an incentive structure that reduces uncertainty and promotes efficiency, thereby contributing to stronger economic performance. Included in this institutional structure are the laws and political and social norms and conventions that are the basis for successful market production and exchange.

Adherence to the principles of open government, including transparency, accountability and consultation, helps in ensuring that regulation serves the public interest and is informed by the needs of those interested in and affected by regulation. The underlying logic is that adherence to the principles of open government will contribute to better regulatory governance and mitigate important constraints to economic performance, by, for example, reducing the risk of regulatory policy failure, improving policy consistence and lowering corruption and vulnerability to capture by particular interest groups.

In this section we focus on two types of regulatory reform interventions aimed at improving the quality of regulatory governance in developing countries. The first relates to strengthening of regulatory institutions charged with the implementation of regulation policy, particularly in the infrastructure sector. The second relates to the introduction of regulatory impact assessment as a measure of improving the quality of new regulation measures. Both types of regulatory reform are intended to result in better regulatory governance which in turn will lead to improved economic outcomes.

4.1 Regulatory institutions

Since the early 1980s, policy in developing countries has shifted from that of the interventionist state to the focus on the regulatory state (Majone 1994). The regulatory state model envisages leaving production to the private sector where competitive markets work well while using government regulation where significant market failure exists (World Bank 1995). The widespread privatization of state-owned enterprises in developing countries during the 1980s and 1990s was expected to improve the economic and financial performance of the privatized enterprises, however, evidence on the post-privatization performance of the now privately owned enterprises suggested that privatization in the form of a change in ownership was not the critical factor in raising productivity and reducing

production costs (Parker and Kirkpatrick 2004). More important is the introduction of effective competition and organizational or institutional change. In the case of infrastructure industries, simply moving a monopoly from the public to the private sphere will not result in competitive behaviour. A key requirement for economic success then becomes the effectiveness of the regulatory regime in promoting competition or in controlling the anti-competitive behaviour of dominant firms (Box 4).

Box 4: Regulatory governance and utilities' performance

Zhang et al. (2005, 2008) model the impact of privatizing electricity generation in developing countries only, using panel data for up to 51 economies, between 1985 and 2000 or 2001. These studies, using fixed effects panel data modelling, confirm that competition increases service penetration, capacity expansion and labour productivity, but that the effect of privatization alone is statistically insignificant except for capacity utilization. They also confirm that the sequencing of reforms is important. The establishment of an independent regulatory authority and the introduction of competition before privatization are correlated with higher electricity generation, higher generation capacity and, in the case when competition is introduced before privatization, improved capital utilization. The implication for policy is that privatization alone is unlikely to lead to improved performance in terms of productivity and services and that it is desirable to introduce competition and effective state regulation before rather than after privatization occurs.

Gutierrez and Berg (2000) identify the importance of effective regulatory governance in achieving performance improvements in Latin American telecommunications. 'Independent' or quasi-independent regulatory bodies, in the forms of offices, agencies and commissions, have been set up, with the expectation that private capital will only be forthcoming to the desired levels if a high degree of regulatory transparency, consistency and accountability exists.

Wallsten (2001) provides an empirical study of telecommunications in 30 African and Latin American countries, and reports that privatization, on its own, was not associated with efficiency improvements and needed to be combined with building regulatory capacity.

Gutierrez (2003), studying performance in telecommunications in 22 Latin American countries between 1980 and 1997, finds that sound regulatory governance has a positive effect on network expansion and efficiency and competition and divestment by the incumbent operators contributes positively to sector performance.

Galal and Nauriyal (1995) have compared the pre- and post-privatization performance of the telecommunications industry in seven developing countries. They find that countries that solved three regulatory issues, namely incentives, information and commitment, achieved greater improvement than those that failed to do so.

The studies reported on in Box 4 use regression analysis to establish a positive correlation between regulatory institution and utility performance. Typically, the regulatory institutional variable is proxied by a dummy variable which takes a value of one where there is a regulatory body in place, or zero where there is no regulatory authority. In other studies, the World Bank's *Governance Indicators* are used. These data are provided in the form of scale values. Neither data set fully captures the variation in institutional quality and effectiveness of regulatory bodies.

The effectiveness of utility regulation in controlling anti-competitive behaviour can be compromised by regulatory capture. 'Regulatory capture' involves the regulatory process becoming biased in favour of particular interest groups and notably the regulated companies. Regulatory capture is associated with a weighting favouring producer over consumer surplus.

Regulation may also be subject to ‘political capture’, where the regulatory goals are distorted to pursue political ends. This is most likely to arise where the regulation is directly under the control of government ministers; hence the case for some kind of arm’s length or ‘independent’ regulatory agency. Under political capture, regulation becomes a tool of self-interest within government or the ruling elite (Stiglitz 1998).

However, many developing countries lack strong regulatory capability in terms of trained personnel and sound laws to sustain regulatory commitment and credibility. Regulatory offices in developing countries tend to be small, under-manned for the job they face, and possibly more expensive to run in relation to GDP than in developed economies (Domah et al. 2003). The other main difficulties found in many developing countries relate to broader governance problems (Stern and Holder 1999; Minogue 2002) or the legal powers and responsibilities of regulators and their effective independence from regulatory capture. There is country-level case study evidence that suggests regulatory bodies have functioned poorly due to inadequate skills, governance problems and the prevalence of capture (e.g. Cariño 2004, (the Philippines); Knight-John 2004 (Sri Lanka); Arun 2004 (India); also see World Bank 2003 for a statistical overview). Overall, there is evidence of inappropriate transfer, with the models of sector regulation that were developed in the advanced OECD countries being adopted in institutionally less well endowed developing countries (Minogue 2004).

4.2 Regulatory impact assessment

Regulatory impact assessment (RIA) is a widely used regulatory management tool in most OECD countries, and has been a prominent feature of regulatory reform programmes in developing and transition economies (Kirkpatrick and Parker 2008; Rodrigo 2005). RIA can be used both to improve the quality of new regulation and to reduce the quantity of unnecessary or over-costly regulation that is already in place. The ex ante assessment of proposed regulations helps to improve the quality of new regulatory proposals by analyzing the problem that the regulation is intended to solve, identifying alternative ways of dealing with the problem, and assessing the likely positive and negative impacts of adopting the proposed regulation. Where possible, the RIA provides quantified estimates of the positive and negative impacts, using economic values.¹² Ex post, RIA can be used to review the net benefits of an existing regulation, and to ensure that regulations remain consistent with their intended policy objectives. RIA also contributes to the attributes of good regulation in terms of transparency, accountability, consistency, targeting and proportionality.

So far, the bulk of the evaluation evidence on RIA relates to OECD countries, and is concentrated on the quality of the procedural processes associated with the preparation of RIA assessments, rather than on the impact on better regulation (Jacobzone et al. 2010; Radaelli and Fritsch 2012). Overall, the studies show that the adoption of RIA has had a positive effect on the quality and scrutiny of new legislative proposals, with institutional capacity to adopt new procedures playing an important part in determining the extent to which RIA has been ‘embedded’ in the overall public policy management cycle. There is no

¹² Market values can often be used to calculate the economic value of costs and benefits. However, economic values need to be calculated directly when market prices do not exist. The most common areas for ‘missing’ market prices are public health (for example, the value of an improvement in life expectancy), and the environment (for example, the value of biodiversity protection). Economic values also need to be calculated in situations where market prices are imperfect (for example, monopoly markets).

single ‘best practice’ model for RIA and the institutional set up varies according to the legal, political, economic and social conditions in the country concerned.¹³

Evidence on the impact of RIA in developing countries is limited (Box 5), but shows that RIA has been more restricted in its scope, often concerned only with economic regulation affecting the business sector, with responsibility for the application of RIA being given to a single ministry. In many cases, RIA has been adopted as part of a donor funded private sector development programme rather than forming part of cross-government public sector management reform.

Box 5: Regulatory impact assessment

Kirkpatrick et al. (2004) survey RIA procedures and practice in 40 developing and transition economies. The results suggest that a growing number of low and middle-income countries are applying some form of regulatory assessment, but that the methods adopted are partial in their application and are not systematically applied across government. Few countries appear to be applying RIA consistently to regulatory proposals affecting economic, social and environmental policies. While there is a general recognition of the desirability of including benefits as well as costs in an RIA, the main focus is on costs. Methods of quantification were generally underdeveloped. In most cases consultation has been incorporated as part of the process, but has tended to be limited to government and the business sector, with consumer interests and other civil society interest groups being under-represented in the consultation process. Few regulatory authorities in lower-income economies seem to make the results of their consultations public. Finally, in almost half of the countries from which completed questionnaires were received RIA appeared to have been adopted on a standalone basis rather than as part of a broader programme of regulatory governance reform.

Zhang (2010) examines the extent to which RIA as a tool for better regulation design has been integrated into a broader programme of regulatory reform, based on the OECD definition of regulatory reform as involving three complementary components—tools, institutions and policies.¹⁴ The analysis is based on data collected through questionnaire surveys in a sample of developing countries in Asia and Africa in 2003 and 2007. The results show that while the majority of countries in the sample have adopted some form of RIA, few has shifted to taking a systematic view of regulatory governance.

The absence of government-wide regulatory policies signifies a lack of government's commitment to and endorsement for regulatory reform. Crucially, governments have in general not provided an adequate level of tangible support for the implementation of such policies, in terms of resources and required institutions. Neglect of ex post evaluation of regulations constitutes an important limitation and hampers a dynamic approach to policy effectiveness and efficiency. Regulatory tools have not been systematically combined to improve policy development and review processes. Rather, the use of the tools such as RIA and consultation is grafted onto existing procedures, often as a donor funded project, and is regarded as an additional procedural requirement to be met.

5 Key findings

The objective of this paper has been to review the state of knowledge on donor interventions that are intended to improve the economic and regulatory environment for private sector development in developing countries. The focus has been on two aspects of regulatory reform policy: interventions aimed directly at stimulating economic output and growth, and those

¹³ Cordova-Novion and Jacobzone (2011); IFC (2010).

¹⁴ See OECD (2002, 2011).

that are intended to improve regulatory governance as a means of indirectly supporting private sector development and enhanced economic performance.

There is a paucity of data on donor interventions in the area of regulatory reform and private sector development. In part, this is a result of the use of the term ‘private sector development’ to cover a wide range of projects, programmes and strategic interventions aimed at encouraging market-led development. There is no cross country database on donor expenditures on regulatory reform or on private sector development which would permit comparative research and evaluation of donors funding to be conducted. As a result, most of the available evidence relates to regulatory reform per se, rather than to donor supported interventions in this area.

The paper takes the form of a literature review, concentrating on quantitative evidence on the impact of regulatory reform. It covers four main areas: regulatory reform in general, enterprise registration and licensing reform, regulatory institutional strengthening and regulatory impact assessment. The focus is on presenting the available evidence on the economic impacts of regulatory reform in these areas.¹⁵

Impact evaluation methods are designed to help explain how and why a policy intervention has an effect on a target variable(s). A variety of evaluation methods and techniques have been used to estimate the impact of regulatory reform in developing countries, including econometric analysis and experimental methods. However, the capacity of these methods to explain and measure the contribution that a specific intervention has made to a measured economic outcome varies, and the evidence that they provide needs to be carefully interpreted, particularly with regard to attribution and causality.

An important limitation of the impact evaluation literature on regulation policy and governance is the concentration on the costs of regulation. The studies reviewed are predominantly focused on regulatory costs to the economy in general or to enterprise in particular. Indeed, the term ‘regulatory burden’ is used frequently to describe the consequences of regulation. This can be explained in terms of the difficulties that are encountered in attaching an economic value to benefits. Nevertheless, the omission of economic benefits of regulation from many of the studies covered in this review should be borne in mind when interpreting the empirical results.

The literature on regulatory policy in general appears to be the most extensive. Using various proxies for regulatory reform the studies seem to confirm that regulation, when it is not well designed, can stifle economic activities and ultimately reduce economic growth. However, it also appears that regulatory governance and the institutional framework in a country may mitigate the damaging impacts. Regulatory reform also appears to be less effective in terms of improving economic growth in countries where the existing level of regulation is comparatively low. A possible interpretation of this result is that the problem for business may be less the scale of regulation but rather the frequency with which regulations change. Once a business has undergone the ‘set up’ costs of complying with a regulation, removing it may provide little in the way of cost savings. Replacing them with new regulations, intended to be less burdensome, may actually impose a net cost, contrary to the intention. The frequency or regularity with which businesses need to comply with a regulation may be

¹⁵ Studies dealing with the social, environmental and sustainable development impacts of regulation are not included in the review.

important and this too is not captured in data concerned simply with the quantity of regulation. In other words, understanding the dynamics of regulatory policy reform requires a more refined approach to regulation than exists in the current literature.

The measures used to quantify the ‘regulatory burden’ typically aggregate regulations into a single measure. The use of highly aggregated data in cross country analyses means that the more subtle relationships between particular regulations and economic variables are possibly concealed or lost in the aggregation. It is to be expected that different regulations will impact differently on the economy.

The literature on the economic effects of particular areas of regulatory reform or types of regulatory instruments or tools is more limited. The availability of cross country enterprise level data has allowed investigation of the effects of regulation on the entry of new firms into industries and enterprise sector diversification and growth. In general, the findings are consistent with the notion that excessive regulation can reduce the entry of new firms into markets and discourage new investment by existing enterprises. However, there are again problems in interpreting the empirical results, particularly in identifying the underlying causal relationship between regulatory reform and the growth of new and existing enterprises. The impact of enterprise registration reform, for example, appears to be more affected by broader business environment conditions, rather than registration cost reduction per se.

There is also an emerging empirical literature on the relationship between regulatory independence and economic outcomes. The studies reviewed, covering the utilities sector, confirm that economic outcomes are improved when there is an independent regulatory agency. However, the evidence also suggests that the effectiveness of independent regulation is influenced by the threat of continuing political interference in regulatory decisions and by the possibility of regulatory capture. Again, it seems that the results may be context specific, with the effectiveness, and credibility, of independent regulation dependent upon wider governance issues in a country.

Finally, the limited literature on regulatory impact assessment (RIA) in developing countries points to the importance of institutional and political factors in determining the impact of RIA procedures on the quality of regulatory policy in particular, and on the public policy management process more generally. Similarly, the contribution of open government, in the form of consultation, transparency and accountability to better regulation has received little research attention, no doubt because of the difficulty of measuring consultation, transparency and accountability and quantifying the effects.

Looking across the different categories investigated, the scope of the studies is most obviously restricted by the existence of data. Indeed, data availability appears to drive the method, content and direction of the empirical research undertaken. The preponderance of research on regulatory policy in general can be explained in terms of the existence of well-established data bases such as the World Bank’s *Doing Business* and *Governance Indicators*. But this data has its limitations, being based on expert, but nevertheless subjective, opinion surveys. Similarly, the *Doing Business* data relate only to larger limited liability companies, and therefore exclude SME sector enterprises that predominate in the enterprise sector in developing countries.

The accessibility of large panel datasets for developing countries has meant that much of the impact evaluation literature on regulatory reform has used econometric regression analyses to

identify the statistical significance of the regulatory variable and the economic outcomes under investigation, after allowing for other variables that might impact on the results (control variables). But, as discussed in section 2, there are important caveats about the use of regression analysis.

By contrast, there has been limited use of other evaluation methods. Donor evaluation reports on regulatory reform projects have given little attention to issues of attribution and longer term economic impacts. Many tend to be descriptive and lack quantification, which is the focus of this review. There is an emerging literature which uses experimental methods to evaluate the impact of regulatory reform at the enterprise level. But it has proved difficult and costly to create the sample datasets that meets the requirements of this methodology. Where several studies have been carried out, as in the case of Mexico, the results have been interpreted differently.

Most studies have dealt with ‘regulatory burden’ at the national economy level. This has a number of negative consequences. First, there is a risk that differential effects at the regional and local levels are glossed over or ignored. Second, sectoral or industry level differences may be missed. Large enterprises might be expected to be better resourced to comply with regulations than smaller firms and therefore regulation may impact more severely on the latter. Similarly, the competitive structure of a given industry will influence the impact of regulation on the industry’s performance. Second, the focus on the costs of regulation means that while the results provide qualified confirmation of the desirability of regulatory reform, they offer little guidance on the particular reform measures that are likely to be cost-effective or provide ‘value for money’ in terms of costs and benefits of the intervention.

To summarize, there are considerable data and methodological challenges in deriving policy relevant ‘learning’ from the existing literature on the economic impact of regulatory reform in developing countries. Furthermore, it should be recognized that the literature review has focused on economic regulation and has ignored the role of regulation in improving social, health and safety and environmental outcomes. The results of studies that concentrate upon regulatory costs or ‘burdens’ can therefore provide misleading policy results because the crucial importance of regulation for pro-poor or balanced development are ignored. The results do not capture the true welfare effects of regulation reform.

6 Conclusions

This study has provided a review of studies on the economic impacts of regulatory reform in developing countries. In many cases, the regulatory reforms have been part of donor-assisted programmes for private sector development. The review has included examples of the different impact evaluation methods that have been used to provide quantitative evidence on the impact of regulatory policy and governance interventions on economic performance and growth.

The results of the study suggest the following lessons for donors and policy makers. First, the effects of regulatory reform are context specific. The literature on regulatory policy and governance seems to confirm that poorly designed regulation can stifle economic activities and ultimately reduce economic growth. However, it also shows that regulatory governance and the institutional framework in a country may mitigate the damaging effects. In other words, donors should be alert to the dangers of adopting a ‘one size fits all’ approach to

regulatory reform and instead recognize the need to modify and adapt regulatory management processes to meet each country's institutional and regulatory endowment. For example, it is unrealistic and ultimately counterproductive, to introduce a comprehensive RIA procedure across all departments and applied to all new legislation, where human resource capacity within the public sector is limited. Similarly, the reform of enterprise registration procedures, without at the same time reforming licensing regulations, is unlikely to succeed. Independent regulatory institutions will be less likely to affect an improvement in economic outcomes where there is the risk of 'capture' by the regulated industries or where there are inadequate safeguards against arbitrary political interference.

Second, the literature review has revealed the limitations of the quantitative evidence on the economic consequences of regulatory reform in developing countries. This reflects both methodological and data limitations. The methodological approach to evaluation impact has relied heavily on regression analysis. There is an evident need to broaden the range of designs and methods for impact evaluation that can be applied to donor-supported programmes. This would include quantitative, qualitative and 'mixed' methods. While donors have increased their support for methodological research in recent years, much of the investment has been in a relatively narrow range of experimental and statistical methods that are limited in their application to donor programmes. Data problems are reflected in the heavy reliance on publicly accessible panel data sets. There is a paucity of quantitative and qualitative evidence on specific donor projects and programmes. Greater transparency and public accessibility to donors' programme outcomes would allow improved external evaluation and scrutiny of donor interventions, and at the same time would demonstrate donors' commitment to greater accountability and value-for-money.

Third, and following on from the previous point, more attention needs to be given to the benefits of regulation. In assessing or evaluating the impact of regulatory reform an attempt should be made to apply some form of cost benefit analysis. It will seldom be possible to apply a full economic cost benefit analysis where all benefits and costs are valued in economic values, and the net economic benefit is estimated. But where rigorous economic cost benefit cannot be applied, it will often be possible to present quantitative and qualitative data on positive and negative impacts using indicators of 'significance'.

Evidence on the impact of donor-supported regulatory policy and governance interventions is in scarce supply. This review of the current state of knowledge on the impact of regulatory reform in developing countries has revealed that while regulatory reform and private sector development have been widely espoused by donors and policy makers alike, the results of policy interventions in this area are still only partially understood. There is much more work to be done in broadening the range of designs and methods for impact evaluation and in supplementing the available data on donor supported regulatory reform programmes before the regulatory reform agenda can be judged to be firmly evidence-based.

References

Arun, T.G. (2004). 'Regulation and Competition: Emerging Issues from an Indian Perspective'. In P. Cook, C. Kirkpatrick, M. Minogue, and D. Parker (eds), *Leading Issues in Competition, Regulation and Development*. Cheltenham: Edward Elgar.

- Audretsch, D., M. Keilbach, and E. Lehmann (2006). *Entrepreneurship and Economic Growth*. New York: Oxford University Press.
- Bruhn, M. (2011). 'License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico'. *Review of Economics and Statistics*, 93(1): 382-86.
- Cariño, L.V. (2004). 'Regulatory Governance in the Philippines'. In P. Cook, C. Kirkpatrick, M. Minogue, and D. Parker (eds), *Leading Issues in Competition, Regulation and Development*. Cheltenham: Edward Elgar.
- Central Institute of Economic Management (CIEM) (2006). '6 Years of Implementing the Enterprise Law: Issues and Lessons Learnt'. Hanoi: CIEM.
- Ciccone, A., and E. Papaioannou (2007). 'Red Tape and Delayed Entry'. *Journal of the European Economic Association*, 5(2-3): 444-58.
- Cordova-Novion, C., and S. Jacobzone (2011). 'Strengthening the Institutional Setting for Regulatory Reform'. OECD Working Papers on Public Governance No. 19. Paris: OECD.
- Crafts, N. (2006). 'Regulation and Productivity Performance'. *Oxford Review of Economic Policy*, 22(2): 186-202.
- De Mel, S., D. McKenzie, and C. Woodruff (2012). 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka'. Policy Research Working Paper 5991. Washington DC: World Bank.
- Department for International Development (DFID) (2012). 'Broadening the Range of Designs and Methods for Impact Evaluation'. Working Paper 38. London: DFID.
- Djankov S., C. McLiesh, and R.M. Ramalho (2006). 'Regulation and Growth'. *Economic Letters*, 92: 395-401.
- Djankov, S., R. La Porta, F. Lopez-De Silanes, and A. Shleifer (2002). 'The Regulation of Entry'. *Quarterly Journal of Economics*, CXVII, 1: 1-37.
- Domah, P., M.G. Pollitt, and J. Stern (2003). 'Modelling the Costs of Electricity Regulation: Evidence of Human Resource Constraints in Developing Countries'. Mimeo. *Risk Regulation, Accountability and Development Workshop*, 26-27 June, University of Manchester.
- Donor Committee for Enterprise Development (DCED) (2010). 'Measuring Achievement in Private Sector Development: Implementation Guidelines'. (www.enterprise-development.org)
- Eifert, B.P. (2009). 'Do Regulatory Reforms Stimulate Investment and Growth? Evidence from the Doing Business Data 2003-07'. Working Paper 159. Washington, DC: Center for Global Development.
- Freeman, N., V.L. Nguyen and H.H. Nguyen (2005). 'Beyond the Headline Numbers: Business Registration and Start-Up in Vietnam'. Private Sector Discussions 20. Hanoi: IFC and Mekong Private Sector Development Facility.
- Galal, A., and B. Nauriyal (1995). 'Regulating Telecommunications in Developing Countries'. Policy Research Working Paper. Washington, DC: World Bank.

- Gutierrez, L.H. (2003). 'The Effect of Endogenous Regulation on Telecommunications Expansion and Efficiency in Latin America'. *Journal of Regulatory Economics*, 23(3): 257–86.
- Gutierrez, L.H., and S. Berg (2000). 'Telecommunications Liberalization and Regulatory Governance: Lessons from Latin America'. *Telecommunications Policy*, 24: 865-84.
- Haidar, J.I. (2012). 'Impact of Business Regulation Reforms on Economic Growth'. Mimeo. Washington, DC: World Bank.
- International Finance Corporation (IFC) (2008). 'Better Regulation for Growth: Regulatory Governance in Developing Countries'. Better Regulation for Growth. Washington, DC: Investment Climate Advisory Service/World Bank Group.
- International Finance Corporation (IFC) (2010). 'Making it Work: 'RIA Light' for Developing Countries'. Better Regulation for Growth. Washington, DC: Investment Climate Advisory Service/World Bank Group.
- Jacobzone, S., F. Steiner, E. Ponton, and E. Job (2010). 'Assessing the Impact of Regulatory Management Systems'. OECD Working Papers in Public Governance No. 17. Paris: OECD.
- Jalilian H., C. Kirkpatrick, and D. Parker (2007). 'The Impact of Regulation in Developing Countries: A Cross-Sectional Analysis'. *World Development*, 35(1): 87-99.
- Kaplan, D., E. Piedra, and E. Siera (2011). 'Entry Regulation and Business Start Ups: Evidence from Mexico'. *Journal of Public Economics*, 95(11-12): 1501-15.
- Kaufman, D., A. Kraay, and M. Mastruzzi (2003). 'Governance Matters III: Governance Indicators for 1996-2002'. World Bank Policy Research Paper 3106.
- Kirkpatrick, C., and D. Parker (2008). *Regulatory Impact Assessment: Towards Better Regulation?*. Cheltenham: Edward Elgar.
- Kirkpatrick, C., D. Parker, and Y.-F. Zhang (2004). 'Regulatory Impact Assessment in Developing and Transitional Economies: A Survey of Current Practice'. *Public Money and Management*, 24(5): 291-97.
- Kirkpatrick, C., D. Parker, and Y.-F. Zhang (2006). 'Foreign Direct Investment in Infrastructure in Developing Countries: Does Regulation Make a Difference?'. *Transnational Corporations*, 15(1).
- Klapper, L., and I. Love (2010). 'The Impact of Business Environment Reforms on New Firm Registration'. World Bank Policy Research Working Paper 5493. Washington, DC: World Bank.
- Klapper, L., L. Laeven, and R. Rajan (2006). 'Entry Regulation as a Barrier to Entrepreneurship'. *Journal of Financial Economics*, 82: 591-629.
- Knight-John, M. (2004). 'Competition, Regulation and Regulatory Governance in Sri Lanka'. In P. Cook, C. Kirkpatrick, M. Minogue, and D. Parker (eds), *Leading Issues in Competition, Regulation and Development*. Cheltenham: Edward Elgar.
- Lin, J.Y. (2011). 'From Flying Geese to Leading Dragons: New Opportunities and Strategies for Structural Transformation in Developing Countries'. WIDER Annual Lecture 15. Helsinki: UNU-WIDER.

- Loayza, N., A.M. Oviedo, and L. Servan (2004). 'Regulation and Macroeconomic Performance'. World Bank Policy Research Working Paper 3469. Washington, DC: World Bank.
- Majone, G. (1994). 'The Rise of the Regulatory State in Europe'. *West European Politics*, 7(3): 77-101.
- Minogue, M. (2002). 'Governance-based Analysis of Regulation'. *Annals of Public and Cooperative Economics*, 7(4).
- Minogue, M. (2004). 'Public Management and Regulatory Governance: Problems of Policy Transfer to Developing Countries'. In P. Cook, C. Kirkpatrick, M. Minogue, and D. Parker (eds), *Leading Issues in Competition, Regulation and Development*. Cheltenham: Edward Elgar.
- North, D.C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- North, D.C. (1991). 'Institutions'. *Journal of Economic Perspectives*, 5: 97-112.
- OECD (2002). 'Regulatory Policies in OECD Countries: From Interventionism to Regulatory Governance'. Paris: OECD.
- OECD (2010). 'Quality Standards for Development Evaluation'. DAC Guidelines and Reference Series. Paris: OECD.
- OECD (2011). 'Draft Recommendation of the Council on Regulatory Policy and Governance'. Paris: OECD.
- Parker D., and C. Kirkpatrick (2004). 'Privatisation in Developing Countries: A Review of the Evidence and Policy Lessons'. *Journal of Development Studies*, 41(40): 513-41.
- Parker D., and C. Kirkpatrick (2012). 'Measuring Regulatory Performance: The Economic Impact of Regulatory Policy: A Literature Review of Quantitative Evidence'. Expert Paper No. 3. Paris: OECD.
- Parker, D. (2002). 'Economic Regulation: A Review of Issues'. *Annals of Public and Cooperative Economics*, 73(4): 493-519.
- Radaelli, C., and O. Fritsch (2012). 'Measuring Regulatory Performance: Evaluating Regulatory Management Tools and Programmes'. Expert Paper No. 2. Paris: OECD.
- Ravallion, M. (2009). 'Evaluation in the Practice of Development'. *The World Bank Research Observer*, 24, 1, February.
- Rodrigo, D. (2005). 'Regulatory Impact Analysis in OECD Countries: Challenges for Developing Countries'. South Asian Third High Level Investment Roundtable, June. Paris: OECD.
- Shaffer, P. (2011). 'Against Excessive Rhetoric in Impact Assessment: Overstating the Case for Randomized Controlled Experiments'. *Journal of Development Studies*, 47: 11.
- Stern, J., and S. Holder (1999). 'Regulatory Governance: Criteria for Assessing the Performance of Regulatory Systems: An Application to Infrastructure Industries in the Developing Countries of Asia'. *Utilities Policy*, 8: 33-50.

- Stiglitz, J. (1998). 'Private Uses of Public Interests: Incentives and Institutions'. *Journal of Economic Perspectives*, 12(2): 3-22.
- Swedish Agency for Growth Policy Analysis (SAGPA) (2010). 'The Economic Effects of the Regulatory Burden'. Ostersund: SAGPA.
- Wallsten, S. (2001). 'An Econometric Analysis of Telecom Competition, Privatization, and Regulation in Africa and Latin America'. *Journal of Industrial Economics*, 49(1): 1-20.
- White, H. (2009). 'Theory Based Impact Evaluation: Principles and Practice'. Working Paper 3. Washington, DC: International Initiative for Impact Evaluation.
- World Bank (1995). *Bureaucrats in Business: The Economics and Politics of Government Ownership*. Oxford: Oxford University Press for the World Bank.
- World Bank (2003). *Doing Business in 2004: Understanding Regulation*. Washington, DC: World Bank and Oxford University Press.
- World Bank (2009). 'Knowledge in Development Notes: Impact Evaluation'. <http://econ.worldbank.org/research/kindnotes>
- Zhang, Y.-F. (2010). 'Towards Better Regulatory Governance: Regulatory Reform in Selected Developing Countries, 2003-2007'. *Public Management Review*, 12(6): 873-91.
- Zhang, Y.F., D. Parker, and C. Kirkpatrick (2005). 'Electricity Sector Reform in Developing Countries: Does the Sequencing Matter?'. *Quarterly Review of Economics and Finance*, 45: 358-79.
- Zhang Y.F., D. Parker, and C. Kirkpatrick (2008). 'Electricity Sector Reform in Developing Countries: An Econometric Assessment of the Effects of Privatisation, Competition and Regulation'. *Journal of Regulatory Economics*, 33: 159-78.