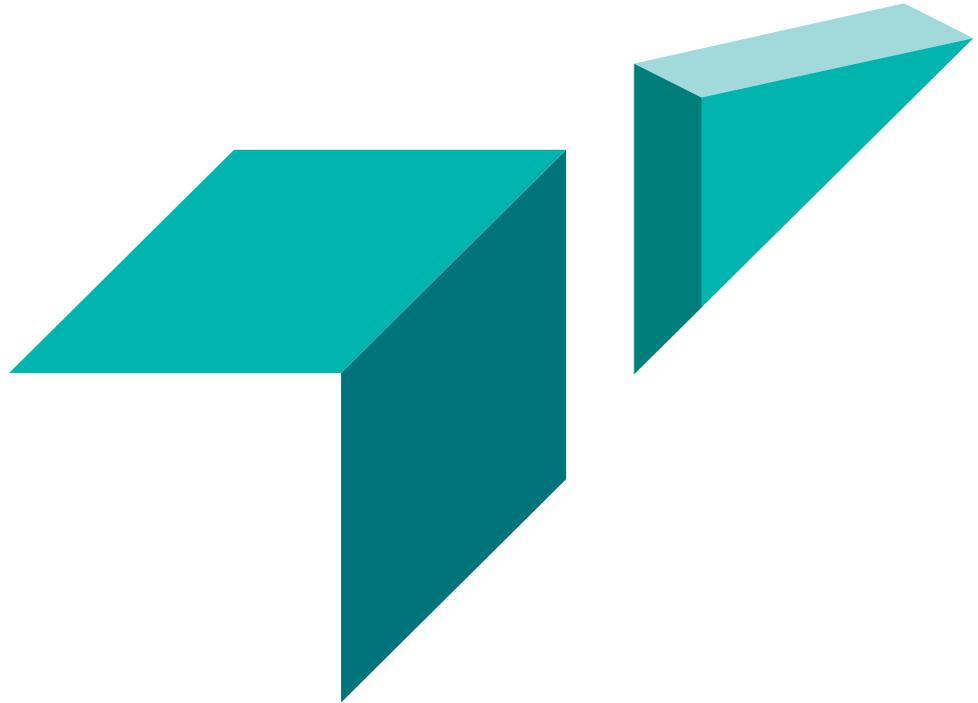


Regulation and competition

– A literature review



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Preface

In 2014, the Swedish Agency for Economic and Regional Growth was assigned by the Swedish Government to annually follow up on how businesses' administrative burden is affected by new and amended regulations until 2020. From 2016, other regulatory costs than administrative costs are also included in the follow up, including indirect effects such as impacts on competition. To build up our internal knowledge on the subject of the impact of regulation on competition, a literature review has been completed on the topic.

The focus of the literature review is the impact of regulation on competition, nationally as well as internationally. A clear result from the study is that indirect effects of regulation are significant and hence important to consider when designing new regulation.

Caroline Wigerstad has written the report, under Eva Hagsten's lead. Special thanks is dedicated to Kristina Nyström and Lars Widell for useful comments and guidance during the process of writing the report.

Stockholm, March 2017

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Summary

Competition is generally recognised as a crucial driver of economic growth. Rules and regulation, in turn, are a pre-condition for the functioning of markets and enabling competition. However, regulation can also negatively impact on competition in several ways, including by limiting the number of suppliers in the market or limiting the incentives or ability of firms to compete. Regulation which creates entry barriers or burdensome labour market regulation are highlighted in the literature as particularly problematic in terms of hindering effective competition. This, in turn, can have significant impact on productivity and economic growth.

Other examples of regulations that can be damaging to competition include price regulations or restrictions to marketing activities (limiting firms' ability to compete) or the introduction of self-regulatory regimes encouraging cartel-like behaviour or requirements that businesses publish certain information about the operation of their business (limiting firms' incentive to compete). What is more, another important factor of effective competition is the availability of good quality information about goods and services, enabling consumers to make informed decisions about which supplier to choose. Rules that cause or allow complex pricing systems, for example, have been shown to hamper consumer activity, reducing competitive pressure among suppliers.

The impact of labour market regulation on competition and business activity is an area where extensive research has been done. The empirical evidence appears ambiguous however. On the one hand, heavy labour market regulation, in terms of for example strict employment protection, has been suggested to hamper firm entry or discourage businesses from expanding. On the other hand, a flexible labour market with low hiring- and firing restrictions may affect employee behaviour by making them feel discouraged to invest in their own skills. Hence, too strict and too flexible labour market regulations may both ultimately negatively impact on firm creation or firm productivity in different ways, and could by extension reduce competitiveness.

Governments have in recent years tended to focus on reducing the regulatory burden for businesses in terms of administration and direct compliance costs of regulation. While this has been, and is, regarded positive for businesses, the literature shows that some of the most significant impacts of regulation take the form of indirect effects such as inhibiting competition and the formation of new firms. Hence, it is argued to be of importance to consider such indirect effects when governments propose new or amended rules. Acknowledging the full potential impact of rules and regulations before implementation should contribute to the creation of good quality rules, which encourage competition and contribute to boosting economic growth and consumer welfare.

Introduction

Competition, which is a process of rivalry between firms, is a crucial factor driving economic growth (Buccirosi et al, 2011). Acting as a disciplining device, competition places pressure on firms to innovate and become more efficient, and ensures that more productive firms increase their market share at the expense of less productive firms (Nordic Competition Authorities, 2013). The increase in productivity on the aggregate level ultimately contributes to increased economic growth. Competition can also act as a defence against protectionism and contributes to keeping markets open to new entrants, making countries more attractive as a recipient of foreign direct investment. Crucially, effective competition tends to bring benefits to customers in terms of lower prices, higher quality and more choice (Stucke, 2013).

Rules and regulation, in turn, are a pre-condition to ensure the functioning of markets and to allow effective competition between firms. However, poorly designed rules can impose significant costs on businesses and society as a whole; they can deter investment and innovation; discourage or hinder competition; and make it more difficult to trade with other economies (Growth Analysis, 2010). The challenge is for policy makers to design rules and regulations so that the objectives of creating well-functioning markets, ensuring that health and safety and other social and environmental objectives are pursued in a way that minimises the negative impacts of regulation (OECD, 2014). Balance needs to be struck between the necessity of rules for the functioning of markets and achieving a minimum level of regulatory burden which does not impede domestic and international competition.

In terms of reducing the regulatory burden in recent years, emphasis has primarily been on removing administrative costs associated with complying with regulation, while indirect costs, including negative effects on competition, have largely been overlooked. From the literature it is clear that it would be beneficial with a greater focus on the indirect consequences of regulation, in addition to direct costs, when implementing new rules. This could contribute to better targeted and more effective rules, more effective competition and ultimately increased consumer welfare and economic growth.

The purpose of this report is to provide an overview of the available research on the impact of regulation on competition. The report focuses on the harmful effects of regulation on competition. It does not consider the potential market failures or other social, environmental or political motives which may justify the regulations in question.

First, a discussion around competition, regulation and economic growth is provided. This is followed by a brief overview of some of the available theories of how regulation comes about. Third, the regulatory burden, including direct and indirect costs of regulation, is discussed. Fourth, some empirical evidence from the literature on the impact of rules and regulation on the economy and competition is presented. Fifth, data and some conclusions from two international indices measuring the regulatory burden is presented. Finally, some concluding remarks are provided.

Competition, regulation and economic growth

Competition and growth

Competition is widely recognised as a vital factor contributing to accelerated economic growth and increased consumer welfare, primarily due to its stimulating effects on increasing efficiency (Gomaa, 2014; Buccirosi et al, 2011). It is argued to enhance both productive efficiency, by minimising production costs, and dynamic efficiency, by providing incentives for the development of new products and production techniques.

However, the contribution of competition to economic growth has been widely debated by economists. Some theories argue that competition constrains innovation, while others maintain the opposite. The Schumpeterian branch of endogenous growth theory belongs to the former, and argues that some degree of market power allowing abnormal profits is necessary to provide the incentive for firms to develop new products and processes (Gaffard, 2006). Accordingly, product market competition is argued to reduce incentives for innovation and growth. What is more, weak patent protection is argued to negatively impact on research and development (R&D) incentives by reducing the expected duration of rents from innovation (Aghion et al, 2000).

Counter-arguing the Schumpeterian view, Aghion et al (2000) have pointed out that the incentive to innovate does not depend on the rents of the innovator per se, but rather on the difference between the rents of a successful innovator and an unsuccessful one. Indeed, Aghion et al (2000) highlight that in reality, most innovative activity occurs within industries comprising more than one firm. Crucially, they argue that more product market competition may reduce a firm's pre-innovation rents by more than it reduces post-innovation rents. In this scenario, an increase in product market competition can stimulate R&D by increasing the incremental profit from innovating, strengthening the motive to innovate in order to escape competition with "neck-and-neck" rivals (Aghion et al, 2000). In their study, Aghion et al (2000) investigate whether more intense competition is good or bad for innovation and growth. The results show that the Schumpeterian effect of more competition is almost always outweighed by the increased incentive for firms to innovate in order to escape competition. That is, when allowing product market competition and the level of patent protection to vary in their model, it is found that the maximum growth rate is always achieved by allowing the maximum degree of competition. Looking at patent protection in isolation, the study finds that as the level of patent protection weakens, the growth rate always falls.

Regulation and growth

The relationship between regulation and economic growth is a complex one, as regulation is both a precondition for the functioning of markets as well as a commonly cited hindrance for firms to enter new markets, innovate and grow (Growth Analysis, 2010). Regulation also affects different types of firms differently. A distinction is commonly made between businesses that have the capacity and interest to innovate their way out of regulation and those who do not have this capacity (UK Department for Business Enterprise & Regulatory Reform, 2008). The former tends to be larger firms with an innovation track-record and a degree of market power that allows them to pass on some of the costs of more stringent regulation to their customers. Smaller firms may not have the capacity to do this (UK Department for Business Enterprise & Regulatory Reform, 2008). Hence, the burden of regulation is often more likely to affect small and medium-sized enterprises (SMEs) negatively. SMEs, who are seen as crucial drivers of competition,

job creation and economic growth, are therefore sometimes exempt from new regulatory measures (Rincon-Aznar et al; 2010, UK Government, 2015).

With regards to regulation and economic growth, a study by the OECD shows that increased competition through domestic product market reforms in the EU and the US to OECD best-practise levels is associated with both static (one-off) and dynamic (continuous) gains in GDP via an improvement in multi-factor productivity (i.e. the combined productivity of labour and capital) (OECD, 2005b). In the study, best practise is determined by the country with the least restrictive policy stances for two key components of product market regulation; state control and barriers to entrepreneurship. Regarding state control, best practice was set by Australia, who was estimated to have the least restrictive policy related to the size and scope of the public enterprise sector. Denmark and Ireland were assessed as having the lowest administrative burdens on the start-up of new business, and Ireland and the UK were estimated to have the lowest barriers to competition. Static gains were projected to arise from better allocation of existing resources and from a take-up of slack in the use of resources. Dynamic gains, in turn, were expected to arise from greater efforts to innovate and optimise production, and from more rapid diffusion of new technologies.

The effects of regulatory reform enabling more competition on for example innovation and productivity can be diverse however, and depend on factors such as the technological characteristics of the industries or the distance of a firm or country to the technological frontier (Scarpetta and Tressel, 2002; Nicoletti and Scarpetta, 2003; Rincon-Aznar et al, 2010; Aghion et al, 2006). In sectors where firms are technologically similar, firms' potential to innovate and catch up might be greater and increased competition might provide an incentive for firms to innovate in order for incumbents to 'escape' competition (Rincon-Aznar et al, 2010). The overall effect of increased competition on the economy is argued to be stronger the higher proportion of technologically similar industries. For example, Nicoletti and Scarpetta (2003) show that strict product market regulation and a lack of regulatory reforms may underlie the relatively poorer productivity performance of some European countries over the period 1984-1998, particularly in high-tech and ICT-related industries. Reasons for this, it is argued, include that regulation which limits entry may have hindered the adoption of existing technology by a reduction in competitive pressure and restricted new high-tech firms from entering the market. A number of other studies of the ICT sector also suggest that entry barriers resulting from regulation have had negative impact on productivity growth in the sector. It is argued that the adoption and dissemination of technology in this sector is heavily dependent on the entry of new, often small, firms, which tend to be more sensitive to regulatory barriers (UK Department for Business Enterprise & Regulatory Reform, 2008).

What is more, a study by Ciccone and Papaioannou (2007) shows that countries where legal status to operate firms can be obtained more quickly see significantly more entry in industries that experience expansionary global demand and technology shifts. Klapper et al (2006), in turn, investigate the effect of market entry regulations on the creation of new limited-liability firms, the average size of entrants and the growth of incumbent firms. They find that costly regulations hamper the creation of new firms, especially in industries that should naturally have high entry. These regulations also force new entrants to be larger and cause incumbent firms in naturally high-entry industries to grow more slowly. The authors make the point that entry regulation has costs over and above the direct costs of compliance and enforcement and that authorities should weigh in these excess costs when making policy decisions. Another study looking at regulatory reforms of the business sector in Sweden during the 1990s supports this finding, arguing that imposing regulations without considering the potential effects on business sector incentives and efficiency might be counterproductive (Heyman et al, 2015).

Theories of regulation

Governments intervene in markets for various reasons, one of which is to enable effective competition between firms. Rules and regulation are needed to secure transparent and efficient competitive markets. Particularly important are rules related to property rights and credible sanctions systems when property rights are violated (Swedish Entrepreneurship Forum, 2015). Other reasons for government intervention include prevention or correction of market failures, which can arise from the presence of externalities and public goods, excessive market power, the existence of natural monopolies and inefficiencies from insufficient or asymmetric information. In reality, there are a number of complex political and other interests involved in the making of rules, in addition to serving social, economic and environmental goals. Legitimate public welfare goals are mixed with the interests of various powerful groups and organisations in society. There are a number of theories as to how this happens in the literature.

Public interest theories

The public interest theory of regulation assumes that regulation serves the interests of consumers by restricting harmful actions of businesses (den Hertog, 1999; 2010; Posner, 1974). The theory assumes that regulatory intervention occurs to correct market failure under the premise that this will increase social welfare (den Hertog, 1999; 2010; Djankov et al, 2002). It assumes that regulators have sufficient information and enforcement powers to effectively promote the interest of the public, aiming at achieving an optimal allocation of resources to benefit society. Similarly, the starting point of the Austrian theory of regulation, which is a reformulated version of the public interest theory, is also that regulation is well intended and potentially justified, but argues that mismanagement by regulators and/or the intervention in the market and the distortion it creates skews competition and causes problems in the market. These problems may in turn require further interventions, creating a spiral of ever increasing levels of regulation, as additional rules are imposed to correct for the distortions created by the original rules in the first place (Growth Analysis, 2010).

However, as pointed out by Posner (1974), if the public interest theory of regulation is correct, regulation would mainly be found in industries where the danger of monopoly is the greatest and in industries that generate significant positive or negative externalities (Posner, 1974). This is not the case – regulation does not appear to be positively correlated with the presence of externalities or monopolistic market structure. Posner (1974) also argues that the so called Austrian version of the public interest theory is unsatisfactory. This is based on evidence that those with legislative powers frequently desire socially undesirable results of regulation. In addition, evidence showing mismanagement by regulatory agencies is weak.

Private interest theories

Another strand of theories of regulation, so called private interest theories, assume that regulators do not have sufficient information with respect to costs, demand, quality and other dimensions of firm behaviour. They can therefore only imperfectly, if at all, promote the public interest when controlling firms (den Hertog 1999; 2010; Growth Analysis, 2010). The public choice theory, which sits within private interest theories of regulation, starts from the premise that all individuals, including public servants, are driven by self-interest (den Hertog 1999; 2010; Growth Analysis, 2010; Djankov et al, 2002). Politicians are assumed to make decisions in favour of businesses in order to maximise their own chances of becoming re-elected. What is more, the public choice theory argues that

employees of regulatory agencies are also driven by self-interest, maximising their own satisfaction and not that of the public. This insight suggests that regulatory agencies attempt to expand their bureaucratic structure in order to serve the interests of the bureaucrats. Bureaucrats are believed to respond favourably to lobbyists and special interest groups.

The capture theory states that government regulations often end up serving the regulated firms rather than the public (den Hertog 1999; 2010). The theory proclaims that firms seek licensing and other regulatory provisions to prevent other firms from entering the market, or seek price regulation to prevent price competition. Regulators might end up taking over the role of for example monitoring cartel pricing schemes, which individual firms in a cartel would be incapable of doing themselves. The regulated firms, who possess an information advantage over the regulatory authorities who often rely on information provided by those firms, thereby find ways to get the regulators to enforce regulations that protect profits. Ultimately, regulators get “captured” by the firms they are supposed to be regulating. The Chicago theory poses that regulation is acquired by the industry and is designed and operated primarily for its own benefit (den Hertog, 2010). It argues that interest groups that can organise themselves less expensively than others will exercise political influence. Politicians, assumed to aim for re-election, honour the demand for regulations by the interest groups who supply votes and other resources in return.

However, critics of the private interest theories point out that regulation in practice often appears to serve the interest of consumers rather than the interests of the industry. What is more, much regulation, such as environmental regulation and health and safety regulation, is opposed by businesses (den Hertog, 2010). Generally, though, it has been argued to be difficult to empirically test the private interest theories, not least due to the fact that the influence of one interest group depends on the influences of other interest groups and on the importance of the constituency for the regulator (den Hertog, 2010). It is considered difficult to determine the relative importance of an interest group.

Testing the validity of the different theories of regulation, Djankov et al (2002) look at data on regulation of entry of start-up firms in 85 countries, including the number of procedures, official time and official cost that a start-up must bear before it can operate legally (Djankov et al, 2002). The study shows that countries with heavier regulation of entry have higher corruption and larger unofficial economies, but not better quality of public or private goods. Countries with more democratic and limited governments have lighter entry regulation. The evidence supports the public choice view that entry regulation benefits politicians and bureaucrats, but is inconsistent with public interest theories (Djankov et al, 2002). Others argue that theories of regulation are difficult to test empirically, and that it is difficult to rank public and private theories in terms of which is best at explaining the existence of regulation (den Hertog, 2003; 2010; Posner, 1974).

To conclude, though difficult to test empirically, the available evidence in the literature seems to support private interest theories of regulation to a greater extent than public interest theories. Generally, both strands of theories seem to suggest that the level of regulation will exceed that which is optimal for society (Growth Analysis, 2010).

Table 1. Summary of theories of regulation¹

Theory	Rationale
Public interest theories	Intervention to correct market failures and to increase social welfare.
<i>Austrian theory</i>	Regulation is well intended, but the distortion in the market the intervention creates causes problems which require further interventions. Regulatory spiral.
Private interest theories	Regulators do not have sufficient information regarding costs, demand, quality and other dimensions of firm behaviour. Can therefore only imperfectly, if at all, promote the public interest when regulating firms.
<i>Public choice theory</i>	All individuals are driven by self-interest. Politicians make decisions in favour of businesses in order to maximise their own chances of becoming re-elected.
<i>Capture theory</i>	Regulations often end up serving the regulated firms rather than the public. Regulated firms, which possess an information advantage over the regulatory authorities, get regulators to enforce regulations that protect profits. Regulators get “captured” by the firms they are supposed to be regulating.
<i>Chicago theory</i>	Regulation is acquired by the industry and is designed and operated primarily for its own benefit. Interest groups that can organise themselves less expensively than others will exercise political influence. Politicians honour the demand for regulations by the interest groups who supply votes and other resources in return.

¹ This list is by no means exhaustive. See Posner (1974) or den Hertog (1999, 2010) for examples of more thorough reviews of the economic theories of regulation.

The regulatory burden

Direct and indirect costs of regulation

Independent of the justification and potential benefits of regulation, it imposes costs on society and can have potentially significant macro- and microeconomic consequences (Nicoletti and Scarpetta, 2003; Gelauff and Lejour, 2006). Regulation can have both direct and indirect costs (European Commission, 2013). Direct costs are made up of financial costs, including regulatory charges such as fees, levies and taxes; investment costs; enforcement costs; and administrative costs. They can be one-off, such as the purchasing of new equipment, or recurring, for example if a rule requires specific periodic behaviours, such as periodical re-training of staff or periodical reporting requirements. Due to learning effects, some costs of regulation decrease over time, for example by some tasks becoming less staff intensive and less time consuming to carry out (Growth Analysis, 2010). Direct costs also include so called hassle costs, which are associated with waiting time and delays, redundant legal provisions and corruption (European Commission, 2013).

Indirect costs, in turn, are incurred in areas or experienced by consumers, government agencies or other stakeholders that are not under the direct scope of the regulation, or when regulation has unintended effects on for example competition in a particular market or on the behaviour of firms (European Commission, 2013). Such effects can for example involve entrepreneurs refraining from starting a business in the first place or discouraging established firms from investing, innovating and growing. Imposing regulation without consideration of the potential impact on the incentives and efficiency of businesses might negatively impact on competition and may ultimately hamper economic growth (Heyman et al, 2015; Swedish Forum for Entrepreneurship, 2015). What is more, diverting resources towards regulatory compliance rather than other productive uses creates an opportunity cost of regulation (European Commission, 2013). Such costs are rarely accounted for when the regulatory burden is considered.

Governments have in recent years focussed on trying to reduce the direct costs of compliance, with a particular focus on reducing the administrative burden for businesses (Swedish Entrepreneurship Forum, 2015). A reduction in the administrative burden of regulation is assumed to free up resources that can be more productively employed elsewhere (Gelauff and Lejour, 2006). However, indirect costs of regulation have been argued to potentially incur more significant effects of regulation (Crafts, 2006; Growth Analysis, 2010). Hence, it has been suggested that the definition of the regulatory burden is widened to include the total cost to society of regulation (Crafts, 2006; Growth Analysis, 2010).

Impacts of regulation on competition

Indirect effects of regulation on competition can be significant, not least because competition is closely linked with aspects such as innovation, productivity, employment and job opportunities and economic growth (UK Office of Fair Trading, 2011). Competition may be affected if regulation is introduced which, either directly or indirectly, limits the number of firms in a market or alters firms' ability or incentive to compete. Regulation which limits the ability of consumers to make decisions around goods and services they purchase can also negatively impact on competition. Effects on competition can occur both on a national and international level.

The OECD has issued guidance aimed at regulators when undertaking regulatory impact assessments, including a section on how new rules and regulation might impact on competition (OECD, 2016). The guidance states that a proposal of regulatory change is

likely to have an impact on competition if one or more of the following effects of regulation is true:

- ▶ If it limits the number or range of firms (e.g. through granting exclusive rights for a supplier to provide a good or service, establishing a license or permit as a requirement of operation, or significantly raising the cost of entry or exit by a supplier).
- ▶ If it limits the ability of firms to compete (e.g. through limiting sellers' ability to set prices for goods or services, limiting the freedom of suppliers to advertise or market their products or setting standards for product quality which provides an advantage to some suppliers over others).
- ▶ If it reduces the incentive of firms to compete (e.g. through creating a self-regulatory or co-regulatory regime, requiring information on supplier outputs, prices, sales or costs to be published, or exempting the activity of a particular industry or group of suppliers from the operation of general competition law).
- ▶ If it limits the choices and information available to consumers (e.g. by limiting the ability of consumers to decide from whom they purchase, reducing mobility of customers between suppliers by increasing the costs of switching suppliers, or fundamentally changing the information required by buyers to shop effectively).

In addition to the above mentioned factors, being able to adjust the level and composition of the workforce in order to adapt to changing demand conditions is vital for effective business operation. Businesses' ability to do this will partly depend on the labour market regulations in place (World Bank, 2016; Bjuggren, 2013). Regulations related to the labour market are not explicitly mentioned in the OECD's competition assessment checklist, but can still have substantial impact on competition, not least countries' ability to compete internationally (OECD, 2013). Indeed, studies have shown that labour market regulations can have significant impact on a number of economic outcomes, including aggregate job flows, productivity, growth and the speed of adjustment to economic shocks (World Bank, 2016; OECD, 2013). The potential impact of labour market regulation on competition is dealt with in a separate section of this report. Examples of such regulation include minimum wage, sick pay, unemployment protection and rules around the process of dispute resolution, affecting both the cost of labour and the cost of labour adjustment (Rincon-Aznar et al, 2010).

Number and range of firms

Regulation can affect the number of suppliers in a market in a number of ways; implicitly by creating barriers to entry and exit, and explicitly by for example renationalising an industry, granting a business exclusive rights to a market, or restricting the number of suppliers in a geographical area (OECD, 2016). New businesses entering the market and replacing less productive ones is an important factor of business dynamism and economic growth (Brandt, 2004). A report investigating the relationship between regulation and economic performance notes that several firm level studies show that entry liberalisation and the process of entry and exit has had a positive influence on productivity growth in a number of OECD countries (Rincon-Aznar et al, 2010).

Regulation creating barriers to entry can consist of considerable administrative and bureaucratic procedures associated with starting a business, including the length of time it takes; the number and cost of any permits or licenses required; or minimum capital requirements to start a business (World Bank, 2016). Other examples of entry barriers include difficulties associated with obtaining access to credit, the tax regime, difficulties closing a business or labour market regulations making it difficult or costly to hire and fire staff.

In their study, van Stel et al (2007) examine the link between business regulation and entrepreneurship in 39 countries using five categories of regulation derived from the World Bank's Doing Business methodology. The categories include *starting a business*, *labour market regulation*, *getting credit*, *paying taxes* and *closing a business* (van Stel et al, 2007). A distinction is made between necessity and opportunity entrepreneurs in the study, and it is argued that opportunity entrepreneurs are particularly affected by regulation. This is explained by the fact that, as they tend to have higher growth expectations, opportunity entrepreneurs are more likely to be deterred from entering a market if they think that regulation might prevent them from reaching their optimal size. The *starting a business* component in the study comprises number of procedures to legally start and operate a business; cost and time required to complete each procedure; and minimum capital requirements. Of these, only the minimum capital requirement component is found to be an obstacle for entrepreneurship (van Stel et al, 2007). This, it is argued, could be explained by the fact that while the creative entrepreneur makes sure to either overcome or avoid bureaucratic burdens, achieving the minimum capital requirement is likely to be more difficult to overcome. Generally, the results in van Stel et al's study indicate that administrative barriers to entry play only a modest role in explaining variations in business entry rates across countries. The authors conclude by arguing that the focus of policy makers on reducing such barriers may be better placed elsewhere (van Stel et al, 2007).

Conversely, a study by Brandt (2004) finds that the administrative burden on start-ups, including the amount of licenses and permits required, is shown to have a potentially significant negative impact on entry rates. In addition, Brandt (2004) draws attention to the importance of exit barriers by showing that the impact of the number of years during which creditors have claims on bankrupt firms' assets on firm entry and survival has a significantly negative effect on firm entry. The study also shows that in countries with high entry and exit barriers, firms invest more time in gathering information about market conditions, competitors and their own potential profitability prior to entering (Brandt, 2004). Firms which find out that they have little chance of survival tend to refrain from entering the market in these instances, causing lower entry rates and higher survival rates compared with countries where entry and exit is less costly. Using data on average survival rates estimated for different cohorts of firms that entered the market from the late 1980s to the 1990s, survival rates are shown to be particularly high in Sweden and the Netherlands, reaching almost 90 per cent (Brandt, 2004). This compares with survival rates in other countries, including the UK, Portugal and Denmark among others, which vary between 62 and 88 per cent. It is also mentioned that cross country differences in firm entry rates partly could be explained by differences in risk tolerance in different countries.

Regarding taxation, Braunerhjelm and Eklund (2013) find that not just the tax rate, but also the administrative burden that the tax system imposes on firms significantly reduces new firm formation. They find that a ten per cent reduction in the tax administrative burden results in a three per cent increase in entry rates. The World Bank's Doing Business 2016 report highlights this as well, emphasising the ease of paying taxes, regardless of the corporate tax rate, as a significant determinant of firm entry (World Bank, 2016).

Firms' ability to compete

Firms compete with each other through a range of different channels, including by price; by offering products of differing quality or characteristics; and by using different sales channels. They can also use branding and advertising as a means of emphasising the differences in their products relative to their competitors. Consequently, regulations

which limit firms' ability to compete includes price controls, product or production method specifications and limits to the freedom of firms to advertise or market their products (OECD, 1998).

Restrictions on comparative advertising by imposing a requirement that any such advertisement is validated by an independent authority is an example of regulation which several countries have in place and which limits the ability of firms to compete (OECD, 2016). While such regulation may ensure that the claims and promises made by businesses are validated and correct, and may indeed facilitate fair competition, unwarranted restrictions on comparative advertising may deprive consumers of useful information about the differences in product quality, attributes and prices across suppliers. This could have negative effects on competition.

In other instances, businesses may not be allowed to advertise their products at all, or may be restricted to using certain types of media or certain times of the day (OECD, 2016). This is sometimes the case with pharmaceutical companies and products related to alcohol and tobacco. In Sweden for example, advertising of alcohol related products was banned until 2003. Today it is strictly regulated, whereby adverts of alcohol related products need to be accompanied by warning texts; can only involve products with alcohol contents below 15 per cent alcohol by volume; and cannot be targeted at people under 25 years of age (SFS 2010:1622). This type of regulation is often applied to demerit goods and tends to be justified on the grounds that consumption, or over-consumption, of the products may be detrimental to consumers' health, or in other ways are socially undesirable. However, such regulations may hinder dissemination of valuable information about product quality and other attributes. Restrictions on advertising may also restrict the entry of new firms by reducing their ability to create brand awareness (OECD, 2016).

Having product and production process specifications and other quality standards in place is often necessary and protects consumers and employees (OECD, 2016). Such standards are often prevalent in the food industry and the construction industry for example. However, too stringent rules on content and minimum quality may negatively impact on firms' ability to compete, limiting the number of producers and range of products.

Firms' incentive to compete

Regulation can affect competition negatively by altering firms' incentives to act as rivals. For example, restricting a business from expanding its market share or growing its profit may reduce the vigour with which that business competes against other businesses (OECD, 2016). Other examples of incentive altering regulations include the introduction of self- or co-regulatory regimes, or allowing cooperation and information exchange between firms. Regulations which inhibit the willingness, ability or incentive of customers to switch between suppliers may also reduce the incentive for businesses to compete (OECD, 2016).

Self- and co-regulation have been argued to have a range of potential advantages, for example through enhanced regulatory credibility through the involvement of industry and other interested parties in the regulatory process, or through improved regulatory quality from drawing on the expertise of the industry in designing the rules. What is more, it has been argued to bring enforcement cost savings by making the regulated parties part of the monitoring of enforcement of the rules. And indeed, such regulation can enhance competition through agreements on design and standards among market participants (OECD, 2016). However, there is a risk involved in bringing competitors together in such a manner, since even though the intention may be to discuss matters of product design and safety standards, participants may be tempted to share thoughts on firm strategies related to pricing, quantity and other aspects (OECD, 2016). This may ultimately lead to price coordination between firms, or coordination to prevent new entry.

Exemptions from national competition laws are prevalent in numerous sectors in many countries, including within energy and utilities, transport, communications and agriculture. Preconditions that need to be met for exemptions to apply in Sweden include that the businesses can prove that cooperation improves the production or distribution of a product, or that it promotes technological development (Swedish Competition Authority). In addition, consumers need to reap a reasonable proportion of the profit that arises due to the cooperation. Sometimes, allowing such cooperation has the purpose of ensuring standards and uniformity; promoting innovation through joint ventures; or countering buyer power (OECD, 2016). An often used example of this is found within agriculture, where joint activity by agro-food producers has been argued to bring a number of potential beneficial effects, including achieving economies of scale and scope, reduced transaction costs and possibilities to conduct research (OECD, 2005a). However, while there may be legitimate reasons for allowing such cooperation, unintended side-effects may arise as competitors are allowed to exchange information about prices and quantities and engage in collusion. An example of such an occurrence, as pointed out by the OECD, is when the Danish competition authority in 1993 decided to collect and publish firm-specific transactions for two grades of ready-mixed concrete in three regions of Denmark (OECD, 2010). Within a year of publication of the data, average prices of the two grades had increased by 15-20 per cent, and it is argued that the publication of prices may have facilitated collusion and contributed to the increase in prices.

Information available to consumers

Consumers having access to information about goods and services is essential for effective competition to take place. It allows them to properly search for the best deals and to compare quality and prices offered by competing firms, putting pressure on them to compete more aggressively with one another (Stucke, 2013). In the UK for example, a review of the energy sector in 2015 by the UK Competition and Markets Authority found potential evidence of weak customer engagement in the retail energy market, signalling a problem with lack of competition in the market (UK Competition & Markets Authority, 2015b; 2016). Specifically, the analysis showed significant gains available to energy consumers from switching energy supplier. This, in turn, was argued to be a potential consequence of the prevailing difficulty for consumers to compare the complex and competing offers by various energy suppliers. The review resulted in a range of suggestions of reforms to revitalise competition in the UK energy sector. Proposed measures included, among other things, reforms to enable price comparison websites to play a bigger role in helping customers find the best offers for them (UK Competition & Markets Authority, 2016).

Significant switching costs or complex switching rules may also have negative effects on competition, as customers are 'locked in' to contracts as they may find it too expensive or too difficult to switch suppliers (Chen, 2011). This is not an uncommon feature in telecommunications, the bank industry, insurance and energy markets (Chen, 2011). In 2014 in Sweden for example, reforms were introduced to the electronic communications law, with one of the purposes being to make it easier for consumers to switch communications provider and increasing mobility and competition in the market (Swedish Ministry of Enterprise and Innovation, 2013). Among other things, a maximum notice period of one month was introduced for consumers wishing to end their contracts, and a requirement that operators unlock phones immediately and at no cost to consumers if they wish for this to be done after the contract has expired (SFS 2003:389).

Labour market regulation

Adding to the cost of labour and limiting firms' ability to adapt their work force to changing economic conditions, labour market regulation can negatively impact on competition. Indeed, the study by van Stel et al (2007) finds that labour market regulations have a greater impact on business start-up rates than the administrative burden associated with starting a business. This implies that those considering to start a business seem to be more influenced by factors that come into play once the business has already been established, rather than those affecting them immediately at the start-up stage. The effect of labour market regulation on entrepreneurship can partly be explained by the fact that less rigid regulations diminishes the safety of a paid job, and the more likely employees may be to start their own business. In addition, business ownership is likely to become more attractive the more flexibility the owner has in running the business.

What is more, labour market regulation in terms of for example stringent employment protection legislation has been found to have a small negative impact on long-run productivity growth, potentially by restricting movement of labour into emerging, high-productivity firms (OECD, 2007). Another study by the OECD shows that firing restrictions are costlier in industries characterised by rapid technological change, such as ICT, and that countries where regulations are more stringent therefore tend to specialise in industries where the rate of technological change is slower (OECD, 2013). Similarly, Gust and Marquez (2002) show that burdensome regulatory environments, in particular regulations affecting labour market practices, hindered the adoption of information technologies and slowed productivity growth in a number of industrial countries in the 1990s (Gust and Marquez, 2002). Labour market regulation has also been argued to reduce the productivity growth rate by slowing down the reallocation from old and declining sectors to new and dynamic ones (Rincon-Aznar et al, 2010). What is more, rigidities in labour markets, employment protection legislation in particular, which adds to the cost of labour, have been shown to discourage firms from exporting through reduced competitiveness as a result from a reduction in firms' operating profits (Helpman and Itshoki, 2010).

However, although the negative effects of stringent labour market regulation appear to be more extensively documented in the literature, too lax labour market regulation could also have adverse effects on firm productivity (Bjuggren, 2013). This could for example be the case if workers are not allowed to take sick leave or have to work long hours with no weekly rest days. In addition, employment protection legislation can have important effects on worker behaviour as it might increase the incentive of employees to acquire more firm specific skills. It may also prevent significant costs associated with job displacement, such as earing losses, loss of job-specific skills and experience and various social costs arising from health problems which may stem from joblessness (Bjuggren, 2013; OECD, 2013). Thus, it appears to be important that policy makers strike a balance between allowing an efficient reallocation of labour resources and the need to protect employees (OECD, 2013).

Measures of regulation

There are a number of international indices measuring competitiveness available, allowing for comparisons between countries. Two often quoted examples of such measures where regulation plays a big role are described below; OECD's Product Market Regulation (PMR) index and the World Bank's Doing Business (DB) index.

OECD Product Market Regulation index

In 1998, the OECD developed an economy-wide indicator of product market regulation (PMR). The PMR indicator is complemented by a set of indicators that measure regulation at the sector level. The indicator is an attempt to turn qualitative data on laws and regulation into quantitative indicators. The PMR data is collected through a questionnaire sent to governments in OECD and non-OECD countries, and is updated every five years. The aggregate PMR indicator is the simple average across the three high-level indicators *state control*, *barriers to entrepreneurship* and *barriers to trade and investment*, under which there are 18 low-level indicators.

As mentioned, OECD countries have considerably liberalised their product markets over the past 15 years, with reforms typically being larger at the beginning of the period. Countries who have lowered barriers to entrepreneurship have done so in particular by streamlining administrative procedures for start-ups, generally simplifying rules and procedures and improving access to information about regulation. Examples of measures to reduce the level of state control that countries have taken include abolishing price controls or improving the design of price control schemes. In terms of sectors, progress has slowed in air and road transport while the pace of reform in professional services has accelerated somewhat.

In 2013, Sweden ranked 26th out of 33 countries on the economy-wide PMR, fairly close to the OECD average (Koske et al, 2015). Due to a number of OECD countries having continued to streamline regulations, in combination with Sweden's PMR barely changing over the past decade, Sweden's ranking has moved from 9th in 2003 to 26th in 2013 (OECD, 2015b). Sweden is pointed out as having relatively complex procedures related to licenses and permits, as well as having a relatively high rate of public ownership of companies (OECD, 2015b).

The index shows that the Netherlands and the UK have significantly more competition-friendly product market regulation than the average OECD country, while PMR is significantly less competition friendly than the OECD average in Poland, Greece, Korea, Mexico, Israel and Turkey (Koske et al, 2015). Among the countries whose regulatory stance is close to the OECD average, including Sweden, the ranking is argued not to have any real significance as the regulatory practices in this group are considered to be so close to each other.

Decomposition of the overall PMR indicator for the OECD as a whole into the three high-level components suggests that competition-unfriendly regulations are higher in the areas of state control and barriers to entrepreneurship than in the area of barriers to trade and investment. Within the *state control* component, high scores are primarily driven by public ownership of firms in business sectors and the poor governance of these firms. High scores on the *barriers to entrepreneurship* component are typically driven by a strong protection of incumbents in network sectors and high administrative burdens on specific firms such as retail shops and road freight companies.

World Bank – Doing Business

For over a decade, the World Bank has published an annual report, Doing Business (DB), with quantitative data on the main regulatory constraints affecting domestic small and medium-sized businesses throughout their life cycles. The 2016 report presents data for 189 economies with information from ten areas of business regulation and focuses on regulations and regulatory processes involved in setting up and operating a business (World Bank, 2016).

The ten areas (*starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency*) are included in a distance to a frontier score and ease of doing business ranking. The distance to frontier score captures the gap between an economy's performance and a measure of best practice across the entire sample. 100 is the frontier and 0 is furthest away from the frontier. The index consists of 36 indicators.

The latest version of the index contains improvements to some of the indicators by expanding the focus on efficiency of a transaction or a service to also include aspects of the quality of that service (World Bank, 2016). For example, the registering property indicator set assesses the efficiency of land administration systems. In the 2016 version of the index, the indicator also encompasses aspects of the quality of the systems, including measuring the reliability, transparency and geographic coverage of land administration systems, as well as aspects of dispute resolution for land issues. In the case of indicators that already cover aspects of quality, the focus has been expanded to include additional good practices covered, as is the case with the indicator protecting minority investors.

Doing Business 2016 results show that the 30 best performing countries are not those with the least regulation, but rather those with good rules that allow efficient and transparent functioning of businesses and markets while protecting the public interest. OECD high-income economies are among those with the best scores on average, with Singapore (scoring 87.34), New Zealand (86.79) and Denmark (84.40) at the top of the list. Sweden ranks 8th, with a score of 81.72. Sweden is mentioned as having considerably reduced the time required to register a company since the last report.

Comparing the two indices

The OECD's PMR turns qualitative data into a quantitative measure of the degree to which policies promote or inhibit competition in areas of the product market where competition is thought to be viable: The Doing Business index is a quantitative measure, which indicates the regulatory costs associated with doing business. The two indices can be viewed as complementary to one another. Indeed, the two indices have been shown to be correlated (Jacobzone et al, 2010). This correlation indicates that when a country has a high quality regulatory management system it is also likely to be performing well in terms of the general business friendliness and competition environments (Jacobzone et al, 2010).

Conclusion

Regulation and, importantly, regulatory quality is crucial for the functioning of markets, economic growth and consumer welfare. One strand of theories of regulation, so called public interest theories, pose that regulation is put in place as a response to market failures. The existence of the excessive regulatory burden is explained by the fact that the regulatory intervention creates distortions in the market, requiring further regulatory measures in a never-ending spiral. The other strand of theories, so called private interest theories, argue that regulation is the result of various powerful interest groups in society who benefit from certain rules and who get their regulatory needs satisfied by politicians and bureaucrats, who act in their own self-interest, aiming for re-election or career advances. While empirical evidence testing the various theories is relatively scarce, at least one study finds evidence to support the private interest theory rather than public interest theory. Still, no one theory is likely to be able to provide a satisfactory explanation for the existence of regulation in general. Instead, they provide a helpful starting point for understanding regulatory intervention and can provide potential explanations as to why the level of regulation is often likely to exceed the level which would be optimal for society.

However well intended and justified, it is clear from the literature that rules and regulation can bring significant direct and indirect costs to individuals, businesses and the economy as a whole, not least through negative impacts on competition. Competition can be negatively affected by regulation which creates entry barriers and limits the number of suppliers in the market, or regulation which limits the incentives or ability of firms to compete. Regulation which restricts the amount of information available to consumers, inhibiting them from making well informed choices with regards to consumption can also hamper competition. Particularly well documented in the literature is the impact of regulation on firm entry. Entrepreneurship and firm entry is regarded as one of the key drivers of competition, innovation, job creation and economic growth, and deregulation enabling new firm creation has been shown to have important effects on countries' productivity.

The impact of labour market regulation on competition and business activity is another area where extensive research has been done. Generally, the empirical evidence appears to indicate that too strict labour market regulation can hamper firm entry and discourage businesses from expanding. However, too flexible labour market regulation can affect employee behaviour negatively, as employees may feel discouraged from investing in their own skills, hampering firm productivity.

From the literature it can be concluded that, while governments' focus on reducing the regulatory burden in terms of administration and direct compliance costs in recent years is positive for businesses, some of the most significant impacts of regulation may indeed take the form of indirect effects such as inhibiting competition in the market and hindering or discouraging the formation of new firms. There appears to be a delicate balance between providing an institutional environment that is conducive to business entry and growth and passing the point where overregulation curbs the potential welfare effects related to entrepreneurship and growing firms. Considering indirect impacts when proposing new and amended rules could ultimately contribute to better quality regulation which encourages competition, ultimately boosting economic growth and increasing consumer welfare.

Sources

- Aghion, P., C. Harris, P. Howitt and J. Vickers, (2006) "The effects of entry on Incumbent Innovation and Productivity", *NBER Working Paper* No. 12027
- Alberto, A., S. Ardagna, G. Nicoletti and F. Schiantarelli (2005) "Regulation and investment", *Journal of the European Economic Association* 3(4): 791-825
- Bjuggren, C-M. (2013) "The effect of employment protection rules on firm productivity – A natural experiment", No. 82, *The Swedish Retail Institute (HUI)*, Stockholm
- Brandt, N. (2004) "Business Dynamics and Policies", *OECD Economic Studies*, No. 38, 2004/1
- Braunerhjelm, P., and J. E. Eklund (2013) "Taxes, tax administrative burdens and new firm formation", *Centre of Excellence for Science and Innovation Studies*, Electronic Working Paper Series, No. 312
- Buccirossi, P., L. Ciari, T. Duso, G. Spagnolo, and C. Vitale, (2011) "Competition Policy and Productivity Growth: An Empirical Assessment", *Düsseldorf Institute for Competition Economics*, DICE Discussion Paper, No. 22
- Burdett, K. and S. Fölster (1994) "Analyzing the effects of taxicab deregulation: A new empirical approach", *The Industrial Institute for Economic and Social Research*, Working Paper No. 410, Stockholm
- Chen, J. (2011) "How do switching costs affect market concentration and prices in network industries", Working Paper, *Department of Economics*, University of California, Irvine
- Ciccone, A., and E. Papaioannou (2007) "Red Tape and Delayed Entry", *Journal of European Economic Association*, 5(2-3): 444-458
- Crafts, N. (2006) "Regulation and productivity performance", *Oxford Review of Economic Policy*, vol. 22 (2), pp. 182-202, Oxford University Press
- den Hertog, J. (1999) "General theories of regulation", Utrecht University
- den Hertog, J. (2003) "Public and private interests in regulation", *Essays in the Law & Economics of Regulation*
- den Hertog, J. (2010) "Review of Economic Theories of Regulation", Discussion Paper Series 10-18, *Tjalling C. Koopmans Research Institute*, Utrecht
- Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer (2002) "The Regulation of Entry", *Quarterly Journal of Economics*, vol. CXVII, issue 1

European Commission (2013) "Assessing the costs and benefits of regulation", *Centre for European Policy Studies and Economisti Associati*, Brussels

Gaffard, J-L. (2006) "Innovation, competition and growth: Schumpeterian ideas within a Hicksian framework", Presidential Address delivered at the *International Schumpeter Society* meeting in Sophia Antipolis, June 2006

Gelauff, G. and A. M. Lejour (2006) "Five Lisbon highlights – The economic impact of reaching these targets", CPD Document No. 104, *CPB Netherlands Bureau for Economic Policy Analysis*, The Hague

Gomaa, M. M. (2014) "Competition and Economic Growth: An Empirical Analysis with Special Reference to MENA Countries", *Topics in Middle Eastern and African Economies*, vol. 16, No. 2

Growth Analysis (2010) "Regelbördans ekonomiska effekter – En teoretisk och empirisk analys", Östersund

Gust, C. and J. Marquez, (2002) "International comparisons of productivity growth: the role of information technology and regulatory practices", *International Finance Discussion Papers*, No. 727, Board of Governors of the Federal Reserve System, Washington DC

Heyman, F., P-J. Norbäck and L. Persson (2015) "The Turnaround of the Swedish Economy: Lessons from Business Sector Reforms", IFN Policy Paper No. 13, *Research Institute of Industrial Economics*

Jacobzone, S., F. Steiner, E. L. Ponton and E. Job (2010) "Assessing the impact of regulatory management systems: preliminary statistical and econometric estimates", *OECD Working Papers on Public Governance*, No. 17, OECD Publishing

Katsoulacos, Y., C. Genakos and G. Houpis (2015) "Product Market Regulation and Competitiveness: Towards a National Competition and Competitiveness Policy for Greece", *Athens University of Economics*, Athens

Klapper, L., L. Laeven, and R. Rajan (2006) "Entry regulation as a barrier to entrepreneurship", *Journal of Financial Economics*, 82, 591-629

Helpman, E. and O. Itskhoki, (2010) "Labour market rigidities, trade and unemployment", *Review of Economics Studies*, 77 (3), pp. 1100-1137

Nicoletti, G. and S. Scarpetta (2003) "Regulation, Productivity and growth: OECD evidence", *World Bank Policy Research Working Paper* 2944

Nordic Competition Authorities (2013) "A Vision for Competition – Competition Policy towards 2020", No. 1/2013

NordREG (2006) "The integrated Nordic end-user electricity market – Feasibility and identified obstacles", Report 2/2006

OECD (1998) "Competition and Related Regulation Issues in the Insurance Industry", *OECD Directorate for Financial, Fiscal and Enterprise Affairs*, Committee on Competition Law and Policy, DAF/CLP (98)20

OECD (2003) "Regulation, Productivity and growth: OECD evidence", *OECD Economics Department Working Paper No. 374*

OECD (2005a) "Competition and regulation in agriculture: Monopsony buying and joint selling", *Directorate for Financial and Enterprise Affairs*, Competition Committee, DAF/COMP(2005)44

OECD (2005b) "The Benefits of Liberalising Product Markets and Reducing Barriers to International Trade and Investment: The Case of the United States and the European Union", *Economics Department*, Working Paper No. 432

OECD (2007) "OECD Employment Outlook 2007", *OECD Publishing*, Paris

OECD (2009) "Improving the Quality of Regulations", *OECD Observer*, Policy Brief

OECD (2010) "Competition Assessment Checklist", Volume II: Guidance, Version 2.0, *OECD Publishing*, Paris

OECD (2014) "Chapter 2: Reducing regulatory barriers to competition", *OECD Going for Growth Interim Report*, OECD Publishing, Paris

OECD (2015a) "Economic Surveys SWEDEN", *OECD Publishing*, Paris

OECD (2015b) "OECD Regulatory Policy Outlook 2015", *OECD Publishing*, Paris

OECD (2016) "Competition Assessment Checklist", Volume III: Guidance, Version 3.0, *OECD Publishing*, Paris

Posner, R. A. (1974) "Theories of Economic Regulation", *NBER Working Paper Series*, Working Paper No. 41

Reform Institute (2014) "Twenty five years of Swedish reforms", Stockholm

Rincon-Aznar, A., G. Nikolaus, I. Paterson, W. Schwarzbauer, R. Sellner, S. Siebert and C. Yildirim (2010) "Regulation and economic performance: literature review", *Service gap Review Paper 4*

Scarpetta, S. and T. Tressel (2002) "Productivity and convergence in a panel of OECD industries: Do regulations and institutions matter?" *OECD Economics Department, Working Papers* No. 342, OECD Publishing, Paris

SFS 2010:1622. Alkohollag. Stockholm: Department of Health and Social Affairs

SFS 2003:389. Lag om elektronisk kommunikation. Stockholm: Department of Enterprise and Innovation

Stucke, M. E. (2013) "Is competition always good?" *Journal of Antitrust Enforcement*, 1(1):162-197

Swedish Entrepreneurship Forum (2015) "Regulation, Firm Dynamics and Entrepreneurship", Working Paper 2015:33

Swedish Competition Authority, <http://www.konkurrensverket.se/konkurrens/om-konkurrensreglerna/--ovrigt--/konkurrenslagen-i-korthet/>

Swedish Ministry of Enterprise and Innovation (2013) "Lätt byte – Enklare att välja ny leverantör av elektroniska kommunikationstjänster", Ds. 2013:9

Swedish Ministry of Enterprise and Innovation (2005) "Liberalisering, regler och marknader", *SOU 2005:4*, Stockholm

Tang, H. (2012) "Labour market institutions, firm-specific skills and trade patterns", *Journal of International Economics*, 87 pp. 337-351

UK Competition & Markets Authority (2015a) "Competition impact assessment – Part 1: Overview", London

UK Competition & Markets Authority (2015b) "Energy Market Investigation – Analysis of the potential gains from switching", London

UK Competition & Markets Authority (2016) "Energy market investigation – Final report", London

UK Department for Business Enterprise & Regulatory Reform (2008) "Impact of regulation on productivity", BERR Occasional paper no. 3, London

UK Government (2015) "Better Regulation Framework Manual – Practical Guidance for UK Government Officials", London

van Stel, A., D. J. Storey and A. R. Thurik, (2007) "The effect of business regulations on nascent and young business entrepreneurship", *Small Business Economics* 28: 171-186

World Bank (2010) "Regulatory Quality and Competition Policy", *Investment Climate Advisory Services of the World Bank Group*

World Bank (2016) "Doing Business 2016 – Measuring regulatory quality and efficiency", 13th ed, Washington DC

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Tillväxtverket, the Swedish Agency for Economic and Regional Growth,

is a government agency under the Ministry of Enterprise and Innovation. We work to strengthen the competitiveness of Swedish businesses by facilitating entrepreneurship and creating attractive environments for companies in the regions. Our vision is more businesses in Sweden that want to grow, and have the capabilities and courage to do so.

Knowledge, networks and funding are our main tools to achieve this. Some efforts are targeted directly at businesses or aspiring entrepreneurs, while other initiatives are aimed at developing the general terms and conditions that affect entrepreneurship. Our biggest single task is helping to ensure that EU funds are invested in projects that promote regional growth and employment.