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WHAT IS THE REAL IMPACT OF REGULATION ON NEW FIRM FORMATION AND GROWTH?

di David. J. Storey

In questo articolo, basato sulla Lezione di Economia Marche tenuta il 9 maggio 2005 presso la Facoltà di Economia di Ancona, il prof. Storey, noto economista industriale dell'Università di Warwick, affronta il problema degli effetti che possono avere i vincoli regolatori sulla formazione e sullo sviluppo di nuove piccole imprese. L'articolo prende spunto da una ricerca, pubblicata nel 2002 da DJANKOV et al., secondo la quale i paesi con una regolazione pesante sono caratterizzati da un'elevata corruzione ufficiale, una più diffusa economia sommersa, più bassi livelli di reddito pro capite ed anche un minor tasso di democrazia. L'impatto di questa ricerca è stato notevole, soprattutto nell'Unione europea, ed ha spinto numerosi paesi, come Francia e Spagna, oltre all'UE stessa, ad adottare politiche volte a ridurre i costi ed i tempi dell'avvio di nuove piccole imprese. Attualmente per far partire una nuova impresa con un numero di addetti compreso fra 5 e 50 servono 62 giorni lavorativi in Italia, 82 giorni in Spagna e soltanto 4 nel Regno Unito. Una successiva ricerca di Capelleras, dello stesso Storey e di altri (2004) sulla Spagna, altamente regolata, e sul Regno Unito, che ha una regolazione leggera, non ha, invece, trovato particolari differenze tra i due paesi per quanto riguarda sia i tassi di nascita sia i successivi tassi di sviluppo delle imprese di nuova formazione. Una possibile spiegazione dell'esistenza di performance simili in paesi così diversamente regolati, sostiene Storey, può essere data dal fatto che l'ultima ricerca, a differenza della precedente, è riuscita ad inserire nel campione delle imprese analizzate non soltanto quelle che compaiono nelle statistiche ufficiali, ma anche altre che, pur svolgendo un'attività legale, fanno parte dell'economia sommersa. In altri termini, un'alta regolazione avrebbe non tanto la conseguenza di ostacolare o impedire la formazione e lo sviluppo di nuove imprese, quanto quella di spingere queste ultime nel regno dell'economia non registrata dalle statistiche ufficiali. Non è tuttavia chiaro e tanto meno provato, conclude l'Autore, se il maggior numero di imprese sommerse, tipico dei paesi con un'elevata presenza di "lacci e laccioli", comporti a sua volta un più basso livello di attività economica.

1. INTRODUCTION

The current conventional wisdom in the academic and policy community seems to be that new firms are good. They provide a positive direct and indirect impact upon productivity and job creation¹. By implication, factors that lead to new firm formation rates being slowed, through making it more difficult or more expensive to establish businesses are undesirable. The evidence for this is provided by Djankov et al² [2002]. They find that countries where regulations are most burdensome are less likely to be democratic, more characterised by official corruption, with larger unofficial economies and lower levels of wealth. They also demonstrate there is a considerable variety in the difficulty of starting businesses in different countries. They take the case of a 'standardised firm'. This is one which performs general industrial or commercial activities, operates in the largest city in the country and has between 5-50 employees one month after commencement. To establish such a standardised firm takes 62 business days in Italy, compared with 4 days in the UK, and 82 days in Spain.³ Djankov et al find no evidence that countries in which it is more difficult to establish businesses have compensating benefits in terms of better quality firms being established.

The impact of this research has been considerable. An examination of the European Green Paper on Entrepreneurship emphasises that the EU is committed to reducing the barriers to starting businesses. This, it sees, as a key element in its plans to reduce the productivity gap between the US and the EU. It appears to embrace with enthusiasm the argument that it is desirable to raise new business formation rates and that any 'barriers' placed in the way of this objective should be either eliminated or minimised.

This lecture takes a rather different view. It draws on two pieces of work, both of which are as yet unpublished. The first is by Capelleras et al [2004], which examined the characteristics of new firms started in Britain and Spain. Its second source is work by Van Stel et al [2005] which examines the factors influencing new firm formation rates using GEM Data⁴. Both papers question whether the impact of regulation, most notably the difficulty of starting a new enterprise, has yet been demonstrated to have real economic significance.

Neither paper questions the political significance of such a policy. Indeed both papers implicitly recognise that entrepreneurs will be irritated if government is seen to be reducing their opportunities for entrepreneurship. The open question is whether this irritation has economic significance by forcing entrepreneurs to act in a manner that lowers national economic welfare.

Our conclusion is that this evidence is not yet available, and that regulation

has perhaps less economic significance than Djankov et al argue. In essence we argue that more evidence is needed to be confident that the policy shift is justified.

2. THE RESEARCH OF CAPELLERAS ET AL

Capelleras et al argue that countries vary in ways in which they regulate and provide an environment for enterprise. The evidence for this is the data presented by Djankov et al [2002]. The contribution of Capelleras et al is to speculate upon the differences that might be expected to appear in the characteristics of new and small firms in a heavily regulated [HR] economy compared with a lightly regulated economy [LR]. They argue that regulation has two direct and one indirect effect.

The first direct effect is to add to the fixed costs of starting a business. Clearly the entrepreneur in a HR economy has to use his or her resources to pay the government in order to establish the firm. It means these resources are not available for financing the business, as would be the case in a LR economy.

The second direct effect of regulation is that it adds to the operating costs of a business. For example, it may be that businesses beyond a size threshold have to comply with legislation on the health and safety of workers, or employment contracts which do not apply to smaller firms. These are additional costs and are argued to discourage businesses from growing.

The third effect of regulation is that it may influence the 'skills set' of new business owners. In an HR economy business owners have to have skills in dealing with the bureaucracy as well as the customers. HR economies may also be characterised by professions and trades in which an individual has to serve a lengthy apprenticeship. Such apprenticeships are argued to provide the customer with greater reliability because the tradesperson is more skilled, but it may also add to conservatism in the marketplace, because individuals with novel ideas, wishing to implement them immediately, are excluded.

For all these reasons Capelleras et al argue that there might be expected to be differences between the numbers of businesses started in an HR economy, compared with an LR economy. They also argue that if the fixed costs of starting a business are higher in an HR economy then this will lead to fewer small business starts.

Thirdly, they argue that the characteristics of small business owners will differ between LR and HR economies, as will the factors influencing business size at start-up.

Finally, they argue that if regulation is important then it is likely that new

business starts will grow more slowly in an HR economy than an LR economy.

3. SO, DO FEWER BUSINESSES START IN AN HR THAN A LR ECONOMY?

This issue is examined by Van Stel et al [2005]. They find, using GEM data between 2002 and 2004 for 44 countries for which regulation data are also available, that the Djankov et al measure of regulatory burdens appears significant in the univariate equations. In other words there is evidence that HR economies have lower rates of new firm formation. However, once other factors are included in the equations, the Djankov measure of regulatory burdens disappears. Van Stel et al find that new firm formation [young business rate] is influenced by the established business rate [+], and the nascent rate [+]. In other words, the number of young firms in the economy is influenced by business formation rates in recent times and by the number of individuals considering starting a business [nascent].

More importantly, they then find that the nascent rate is influenced by the established rate, negatively by income levels, positively by tertiary enrolment and negatively by social security expenditure. In other words, whilst measures of regulatory burdens may be associated with formation rates, much more powerful roles are played by poverty, by education and by social security.

So, why is it that an apparent association has been derived by observing the scale of regulation and new firm formation rates? One possible explanation is presented in Diagram 1. In the top part of Diagram 1a, we see data on new firm formation rates, where this is assumed to be taken from official statistics. The four hypothetical countries are LR1, LR2, HR1 and HR2, where LR = the i^{th} lightly regulated country and HR = the i^{th} heavily regulated economy. It is clear from official data that formation rates in LR1 and LR2 are significantly higher than in HR1 and HR2. If these were then correlated with levels of regulation the conclusion might be reached that high regulation was associated with lower rates of new firm formation.

However, in Diagram 1b, we suggest that regulation may influence the distribution of enterprise between that which is observed and that which is unobserved. In Diagram 1b, we see that in economy HR1 and HR2 there is considerably more unobserved new firm formation than there is in economies LR1 and LR2.

Diagram 1a – Official New Firm Formation

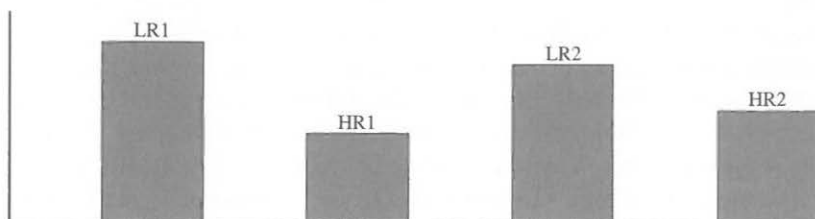
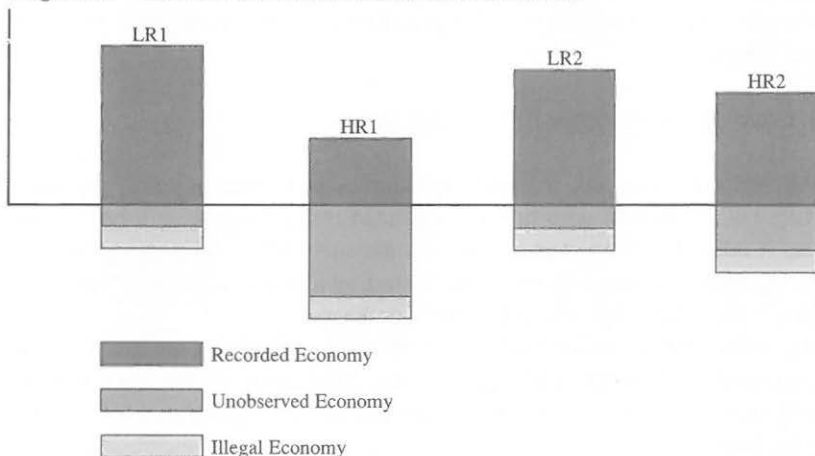


Diagram 1b – Observed and Unobserved New Firm Formation



Why might that be? As Diagram 1b shows, the unobserved elements can be subdivided between those which are illegal or part of the black economy, and those which are legitimate but unobserved. Examples of the latter would include the UK's statistical threshold in observing businesses. In the UK the only businesses which appear in official government statistics are those registered for paying Value Added Tax. The current threshold for this tax is £56,000, so that businesses with sales below this threshold do not appear in statistical records. However, the registering for VAT can be a deterrent to small business owners who may therefore choose to establish multiple businesses all of which have a threshold of below £56,000 but which, if aggregated, would exceed this sales barrier. In terms of Diagram 1b, they would be part of the unobserved economy, but certainly not part of the illegal economy. This illustrates a crucial point that the effect of regulation may not influence the total level of enterprising activity in an economy, but merely

the distribution between that which is observed and that which is unobserved.

We illustrate this in terms of Diagram 1b by showing that the total volumes of enterprising activity in the LR economies, is no different from that in the HR economies. The only difference is the distribution above and below the line, i.e. the distribution between the observed and the unobserved. The simple argument is that individuals will be entrepreneurs in both HR and LR economies, but the form which this takes in the two types of economies may well differ.

Of course it may be correct to say that the economic consequences of having a relatively large unobserved economy may be undesirable, but this has not been the argument used in the EU Green Paper, or other policy documents on this matter.

4. COMPARISONS BETWEEN BRITAIN AND SPAIN

Capelleras et al are able to explicitly examine new firms in lightly regulated (LR) UK, compared with heavily regulated (HR) Spain. It will be recalled that it takes 4 days to start a 'standard' business in the UK, compared with 82 in Spain. Furthermore the costs of starting a business are also very different. They formulate the following hypotheses:

H1: There will be fewer observed small scale start ups in an HR economy compared with an LR economy. The size distribution of observed start-ups will therefore differ with a lower proportion of start-ups being smaller in the LR economy.

H2: The factors that explain initial start-up size in an HR economy will differ from those in a LR economy.

H3: The growth rates of new firms will be slower in HR economies than in LR economies.

To test these hypotheses Capelleras et al identify a sample of new businesses in England and Spain. The English sample comprises firms in Buckinghamshire, Shropshire and Teesside, the Spanish firms coming from around the Barcelona area. The sampling method used certainly covers a high proportion of firms that do not appear in official statistics. For example in the UK sample about 40% of businesses are not registered for VAT.

Capelleras et al then test the hypotheses, H1, that there will be fewer small scale legal start-ups in an HR economy compared with a LR economy. They find no support for this- with the size distribution of new firm start-ups in England and Spain being virtually identical. The arithmetic mean size of employment of the English new firms at start-up is 3.39, compared with 3.26

for the Spanish firms.

On H2, Capelleras et al find that the key factors explaining initial start-up size are very similar in both England and Spain. They find start-up sizes are strongly influenced by the sectoral composition of enterprises and also by their legal status. In both countries limited companies are larger than un-limited companies.

Turning now to H3, Capelleras et al find that the change in employment since start-up is almost identical between England and Spain. Perhaps even more interesting is that they make a distinction between four groups of new enterprises; Group 1 are those where employment has remained unchanged since start-up; Group 2 are those that have grown slowly in terms of employment – defined as those adding less than five workers; Group 3 are those that have grown rapidly, defined as greater than five workers since start-up; Group 4 are those that have declined in employment since start-up.

Capelleras et al find that the distribution between the four groups is very similar between England and Spain. This implies that the growth patterns are also similar. Their second important finding is that the initial size of firms in each of the four groups in England and Spain is also very similar. For example, in both England and Spain the initial size of Group 1 firms is smaller than those in Group 2, which in turn are smaller than Group 3. The latter are smaller than the Group 4 firms. Hence, in both Britain and Spain the smallest starters are the ones that fail to grow, and the largest starters are those which decline. Furthermore, the ones that grow most rapidly begin smaller than those which decline. All of this points to a remarkable similarity of both initial size and subsequent growth of new firms in two economies which appear to be radically different in terms of both initial and post-start regulatory burdens.

5. OVERALL

The issue of regulatory burdens on new and small enterprises is one of considerable current policy interest. A number of countries such as France and Spain - and also the EU more widely -, have sought to lower the cost and time of starting a new enterprise. The purpose of these moves is to allow the creation of more enterprises, which are in turn expected to exert a powerful competitive threat to existing enterprises and so enhance the overall competitiveness of the economy. The work of Djankov et al has been very influential in persuading policy makers to adopt this stance and it is therefore appropriate for this policy move to be scrutinised.

This lecture has reviewed and restated the findings of Capelleras et al who

examine the characteristics of new firms in highly regulated [HR] Spain and lightly regulated [LR] England. They formulate hypotheses that the differences in the regulatory environment between the two countries would lead to different characteristics amongst start-ups and differences in their subsequent growth. In practice they find these differences to be virtually non-existent. One possible explanation for the similarities between England and Spain is that the survey method used by Capelleras et al is successful in identifying both firms which appear in the official statistics as well as those which operate quite legally but outside governments' statistical radar. In essence the argument is that whilst there may be a statistical association between official statistics on new firms and regulatory burdens, the role of regulation is simply to lead to a different composition of observed and unobserved firms. What is less clear is whether this leads to a lower level of aggregate economic activity. To the current author this issue remains unproven.

NOTE

¹ R. Disney, J. Haskel and Y. Heden 'Restructuring and Productivity Growth in UK Manufacturing', *Economic Journal*, July 2003, pp 666-694, 'Between 1980 and 1992, single establishment firms [25% of manufacturing employment] experienced no productivity growth amongst survivors: all productivity gains for this group came from entry and exit'.

² S. Djankov, R. La Porta, F. Lopez-de-Silanes and A. Shleifer [2002], 'The Regulation of Entry', *Quarterly Journal of Economics*, Vol. 67, February, No. 1, pp 1-37

³ J-L Capelleras, K.Mole, F.J. Greene and D.J. Storey (2004), ' Do more heavily regulated economies have poorer performing new firms: Evidence from Britain and Spain', Warwick Business School, Centre for Small and Medium Sized Enterprises

⁴ A van Stel, D.J. Storey, R. Thurik and S. Wennekers (2005), 'From Nascent to actual Entrepreneurship', Paper presented at Second GEM Research Conference, Budapest, 25-27 May.

