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‘Back to the Failure: an Analytic Narrative of the De Lorean Debacle’

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There has been a recent identification of a need for a New Business History. This discussion connects with the analytic narrative approach. By following this approach, the study of business history provides important implications for the conduct and institutional design of contemporary industrial policy. The approach also allows us to solve historical puzzles. The failure of the De Lorean Motor Company Limited is one specific puzzle. Journalistic accounts that focus on John De Lorean’s alleged personality defects as an explanation for this failure miss the crucial institutional component. Moreover, distortions in the rewards associated with industrial policy, and the fact that the objectives of the institutions implementing the policy were not solely efficiency-based, led to increased opportunities for rent-seeking. Political economy solves the specific puzzle; by considering institutional dimensions, we can also solve the more general puzzle of why activist industrial policy was relatively unsuccessful in Northern Ireland.

Key Words: institutions, analytic narrative, Northern Ireland, industrial policy, entrepreneurship

‘[I]n contriving any system of government, and fixing the several checks and controls of the constitution, every man ought to be supposed a knave, and to have no other end, in all his actions, than private interest. By this interest we must govern him, and, by means of it, make him, notwithstanding his insatiable avarice and ambition, co-operate to public good’¹

‘Eternal vigilance is the price of dishonesty’.²

‘[W]hen people ask my advice about investing in Mr De Lorean’s venture I tell them to put money into wine, women and song. They’ll get the same return and have more fun’³

Introduction

There is a need for the creation of a ‘new business history’ as de Jong, Higgins and van Driel have identified.⁴ This paper provides an illustration of one path that such a project could take. The focus on methodology in the paper by de Jong, Higgins and van Driel reflects the wider trend that has occurred within business history during the last decade.⁵ The turn has included calls for a discussion on the methodological directions that any ‘new business history’ should follow.⁶ The continued focus on single firms within business history, as noted by de Jong, Higgins and van Driel, is not the source of the methodological problems faced by business historians. Studying single firms may actually highlight the need for more general (analytic) models. The use of such models, as de Jong, Higgins and van Driel observe, will in turn enable business historians to connect particular business systems, entrepreneurs or firms to more general insights.

Moreover, as argued here, such general insights may have implications related to contemporary policy needs as well as historical puzzle solving. This ability to solve historical puzzles, as well as greater policy focus, may help renew business history.⁷ As some eminent scholars have recently observed, economists are increasingly aware that economic historians

can offer policy lessons from history and debunk myths.⁸ These authors suggest that a greater policy focus will promote the fortunes of economic history. Business historians should follow suit in the trend towards more general policy relevance.

The methodological position criticised in this paper is the (usually implicit) Whiggish assumption that business historians have tended to make by studying only successful organizations. N.S.B. Gras, for instance, argued that dishonest actors would eventually be outcompeted in the world of business.⁹ Consequently, there is a danger in simple biological analogies (or Whiggish historical interpretation) that corporate survivors are superior in some robust way and that failed firms are of trivial historical importance.¹⁰ Note also that the Whiggish assumption does not offer much in the way of policy lessons.

Contemporary commentators are more sceptical of the Whiggish approach. These commentators suggest that simplistic evolutionary arguments are excessively optimistic.¹¹ The “analytic narrative” developed later reinforces the contemporary perspective on business history and uses Public Choice arguments to reject the Whiggish interpretation. Hume’s observation that institutions need to be designed to control knavish behaviour, illustrated in the quote at the start of this paper, anticipates Public Choice. James Buchanan and Gordon Tullock were the pioneers of the Virginia approach to Public Choice. This perspective was defined by James Buchanan as ‘the analysis of political decision-making with the tools and methods of economics’.¹² Buchanan argued that Public Choice offered a theory of governmental failure precisely analogous to the theory of market failure provided by theoretical welfare economics.¹³ Moreover, Public Choice scholars interpret institutional factors as a cornerstone in historical and economic understanding.¹⁴

A Whiggish approach to business history ignores the fact that, depending on the institutional environment, entrepreneurship can be destructive or unproductive rather than productive. Firms may be able to engage in rent-seeking rather than profit-seeking as a way

of remaining in business.¹⁵ As Buchanan observed, firm profit-seeking adds value for society and is thus productive, but rent seeking does not.¹⁶ Rent-seeking behaviour may keep a firm in business by altering the institutional environment in its favour (thereby ensuring it will survive by enjoying positive private returns); however, such an outcome will be socially wasteful. Therefore, at any point of time, firm survival (if it is based on rent-seeking) will not provide a socially optimal form of natural selection. For the purposes of understanding the De Lorean debacle, as well as considering the more general puzzle of the overall failure of industrial policy in the Northern Irish context, it is particularly important to note the empirical observation made by economists that the industrial policies pursued during the Troubles failed to translate into efficiency improvements.¹⁷ This understandable focus on efficiency, however, downplays the political economy dimensions that helps resolve the general puzzle as well as more specific puzzle of a famous commercial failure. Policymakers after the outbreak of unrest had to balance efficiency objectives in industrial policy (such as closing the productivity gap or promoting greater competition) with the need for security and political stability. The desire to promote any economic benefits associated with creative destruction was thus often offset by the need to pursue conflicting objectives.

In terms of structure, we first identify the specific historical problem or puzzle at hand – namely explaining the failure of The De Lorean Motor Company Limited (DMCL). There was no shortage of cash or entrepreneurship. Indeed, it is notable that an entrepreneur, with previously such a glittering career, as well as a government so willing to devote resources to the project would end up with such a costly failure. Identifying inadequacies in the factors of production cannot resolve the specific puzzle. Despite a state of the art factory equipped with the best machinery, and an enthusiastic workforce desperate to prove themselves, the business was in receivership only a year after production started. Solving this (apparent) puzzle will lead us to the institutional ‘analytics’ – in this case the Virginia Public Choice

tradition, and the rent-seeking subfield within that larger literature. This political-economic analysis is then linked to theoretical models of competition and industrial policy and how such a theoretical approach relates to the historical discussion by Crafts on the role of competition and rent-seeking in the economic performance of Britain and Northern Ireland. Rent-seeking, which had been suppressed during the 1960s by institutional reform, re-emerged as a problem against the institutional backdrop of political instability and counter-terrorism.

Such an analytical and more policy-focused approach enables the business historian moreover to go beyond the insights that a purely archival-driven approach delivers, as traditionally practiced by business historians. In the later ‘narrative’ sections of the paper, the analytic narrative will be developed by presenting historical evidence that demonstrates that solving the puzzle concerning the failure of DMCL is more explicable by invoking rent-seeking than pop psychology. Institutional factors misdirected entrepreneurship; it was possible for opportunistic entrepreneurs to mould institutions in their favour. DMCL was the most extreme example of a more general problem.

Using economics to identify and solve the puzzle(s)

Analytic narratives are a subset of a wider “economic” approach to business or economic history – one that is arguably more compatible with business history than standard cliometrics, which is itself a branch of empirical economics. Economists’ standard approach is to formulate a puzzle or puzzles. As already observed, the specific puzzle in this case is explaining the failure of DMCL, which was The De Lorean Motor Company (DMC) factory

based in Dunmurry, Northern Ireland. In resolving this puzzle, a finding with general application is that explaining the failure requires the business historian to consider not only the flaws in the business model of DMCL (and by implication DMC), though they were considerable, but also recognise the distortions of the institutional environment under which DMCL operated. Once these distortions are recognised, any puzzle(s) surrounding DMCL and/or DMC's (henceforth DMCL) failure is (are) resolved and provide clues to explaining the more general puzzle concerned with explaining the failure of regional industrial policy.

From the establishment of the John Z. De Lorean Corporation in 1974 to the receivership of DMCL in 1982, as well as De Lorean's arrest the same year with cocaine with an estimated value of between \$14 million and \$16 million, was marked in equal measure by controversy, scepticism and media interest.¹⁸ DMCL produced a car developed from Giorgetto Giugiaro's iconic car design, a design that served famously as the time machine in the *Back to the Future* film trilogy. The enterprise was an expensive failure underwritten by the UK taxpayer.¹⁹ The Northern Ireland Audit Office (NIAO) has calculated the total cost to the taxpayer at £77 million between 1978 and 1982.²⁰ Recently released files put the total cost figures, which include the compensation for damages associated with civil disturbances at the location, at between £83.9 million and £84.3 million.²¹

McKinsey was commissioned by the Northern Ireland Industrial Development Agency (NIDA) to provide advice on the operation of the firm and it provided monthly progress reports. The fees of these and other consultants do not appear in the official figures. Nor do the opportunity costs to the taxpayer figure appear. Industry insiders observed that even if only £60 million (at 1978 prices) was the total cost of the venture to the taxpayer this still ensured that the subsidy per job was (at £30,000) three times the usual cut-off point for industrial promotion expenditure.²² Yet even these figures, because they ignore the resources devoted to engage in and prevent rent-seeking, underestimate the total social waste. The

excessively generous subsidy package offered to attract the project to Northern Ireland points to existence of the additional rent-seeking costs.

Institutions and analytic narratives in economic and business history

The analytic narrative approach may take the form of a detailed country study informed by growth economics and the institutional or political economy literatures.²³ Rodrik noted that as of 2003 there remained few such papers.²⁴ Yet the combination of institutional and historical analysis with modern economic analysis, as represented by the approach, is part of a long-established ‘family tree’ within economics. It has most directly evolved from the new institutionalism that emerged during the 1970s. While a range of definitions can be found, Ronald Coase’s focus on how institutional structures - including the legal systems, political system and social system - shapes economic performance, gives a flavour of what new institutionalism does and does not involve.²⁵ Given Coase’s Chicago School outlook then, the analytic narrative approach may be traceable back to Chicago’s Law and Economics tradition.

It is possible to classify modern social science along the lines of “thick” or “thin” theory and “dirty” or “clean” empirical work. “Thick” description, as exemplified by much anthropology, highlights the ideographic (particularizing) aspects of a study. In contrast, “thin” or nomothetic (generalizing) theory dominates economics. Likewise, economists favour “clean” empirical work – such as quantitative work in the form of regression; social scientists outside of economics, particularly historians or sociologists, tend to employ “dirty” empirical techniques such as archival study, interviews and ethnography. Analytic narratives attempt to resolve historical puzzles by reconciling the benefits of “thin” description with the

advantages of “dirty” empirics. Boettke, in the matrix illustrated in Table 1, has attempted to provide a simple classification of analytic narratives in relation to three other approaches to historical social science.²⁶

[Insert Table 1 here]

It is possible to reduce the methodological guidelines for conducting a study based on analytic narratives down to the following four characteristics:

Firstly, research within analytic narratives is a puzzle (or problem) - driven not theory-led endeavour.²⁷ The historical phenomenon that forms the basis of such a study can be investigated by conducting research based on reading primary sources and/or secondary sources. The need for researchers to be intimate with detail suggests that qualitative materials are required.²⁸ The immersion in the sources will enable the rational strategic interaction between historical actors to be isolated²⁹;

Secondly, the strategic interaction amongst the actors having been identified, the relationship between actors can be studied more formally. Some writers highlight the role of institutions as self-enforcing equilibriums that coordinate behaviour. Often, but not always, such a formalization involves the use of game theoretic analysis.³⁰ It is essential nevertheless, that the rational choice model chosen – game theoretic or not - bears some similarity to the actual choices and tradeoffs that actual actors faced in the historical phenomenon in question;

Thirdly, the completed model now requires a narrative or “thick description” to be introduced. The purpose of such a narrative is to provide an explanation of the meaning actors attach to their actions, circumstances and surroundings, that is their significance within the local culture³¹;

Fourthly, once a rational choice framework is chosen, the historical analyst can compare the model's predictions along with the outcomes that can be identified from the historical record. When the rational choice model fails to predict (or at best can only suggest a multiple equilibrium outcome) the narrative will need to be engaged to explain, which other factors isolated from the model, account for the outcome.³²

Influential papers by North and Weingast (1989) and Greif (1994) are examples of research that exemplifies the analytic narratives perspective.³³ Recent examples of such studies in economic history journals that cover institutions, multiple equilibria and rent-seeking include papers by Drelichman, Koyama, and Rubin.³⁴ The approach until recently has made little impact on the writing of business history; this situation is beginning to change.³⁵

Analytics: from institutions to entrepreneurship

Probably the most influential discussion of the connections between institutional environments and entrepreneurship derives from Baumol's seminal paper.³⁶ Discussing the volume of and intensity of entrepreneurship in his article, Baumol observed that institutional structures are a determinant of the distinct form of entrepreneurship a particular society faces. Baumol's suggestion that some institutional environments and arrangements, with their associated sets of payoffs, have historically been more compatible with productivity-increasing technological innovations than others.³⁷ He noted that entrepreneurship has historically not always been of the productive variety. Institutions tend to determine both the *level* and *type* of entrepreneurship and he identified three types: productive, unproductive and destructive. Institutional pathologies may ensure that pay-offs are skewed towards rewarding

redistribution favouring sectional interests rather than in return for productive entrepreneurship.³⁸ In extreme cases of dysfunctional institutional payoffs, the relative rewards for rent-seeking may be so high that entrepreneurs will lead a parasitical existence that will damage wider economic performance.³⁹

Analytics: from entrepreneurship to institutions

Baumol's analysis indicates that institutions can determine the balance between productive, unproductive and destructive entrepreneurship. However, Public Choice analysis, reflecting Hume's argument, suggests that a feedback loop exists whereby opportunistic entrepreneurs may alter institutional environments to suit their own interests. In such situations, government intervention may be more a curse than a blessing. Baumol's original analysis has been refined in a number of influential papers that enable us to construct an analytic narrative. The analysis by Murphy et al is concerned with how a country's most talented people choose to seek returns.⁴⁰ The paper thus is concerned with how incentives in a society promote rent-seeking or profit seeking. Table 2 illustrates the factors that promote rent-seeking rather than more socially useful forms of economic behaviour. Murphy et al present a model as well as empirical material that demonstrates the causes and impacts of rent-seeking. The analysis indicates that lawyers are damaging for growth, and engineers are good. According to these authors, the distortions from rent-seeking are threefold: it absorbs labour, it makes the least able entrepreneurs choose to become workers and it turns the ablest people, who are crucial for growth promotion, into rent seekers.

[Table 2 Here]

Acemoglu develops further the analysis of Baumol and Murphy et al.⁴¹ Of most relevance to later sections of the paper, Acemoglu finds that the reward structures that determine the allocation of talent are endogenous. Furthermore, a multiplicity of equilibria and path dependency may occur: initial differences in rewards and/or allocations (for example due to region-specific factors) will have long-run effects as allocations of one generation shape rewards for the next. Acemoglu concludes that his model implies that reward structure determines the allocation of talent, but he acknowledges that a reverse chain of causation may exist in some historical episodes.⁴² Following Baumol's distinction between productive and unproductive entrepreneurship, Nunn develops a model that exhibits multiple equilibria, in order to provide a partial explanation of African economic underdevelopment.⁴³ Nunn's analysis includes some secondary historical literature survey. As with Acemoglu's paper, the combination of the model and history indicates that initial differences (such as disease incidence) can be a profound influence on institutional-economic outcomes.⁴⁴

Henrekson and Sanandaji's contribution is to accept that Buchanan's insights transform Baumol's unidirectional framework into one with a feedback loop.⁴⁵ They observe that just as institutions can channel entrepreneurial supply into productive, unproductive or destructive behaviour, so entrepreneurs can (by choosing to abide, evade or alter institutions) determine institutional creation and evolution.⁴⁶ Evasive entrepreneurship aims at circumventing the institutional framework, while some entrepreneurs may use political activity to alter institutions.⁴⁷ An outline of these definitions is outlined below in Table 3.

[Insert Table 3 here]

The observed allocation of entrepreneurship in the real world, according to Henrekson and Sanandaji, is determined by the relative payoffs between the abiding, evading and altering forms of behaviour. The vertical distinctions in Table 3 (from productive to unproductive/destructive) are separate from the horizontal ones (abide, evade or alter). Henrekson and Sanandaji observe that altering and evading forms are possibilities excluded from Baumol's analysis. Henrekson and Sanandaji observe that the same individual can switch between different forms of behaviour. An entrepreneur for instance can introduce a new product one year and use a frivolous lawsuit – a less socially beneficial form of entry barrier - the next.⁴⁸

Analytics: competition, rent-seeking and industrial policy in theory and application

The contemporary theoretical analysis of competition and industrial policy and the extent to which competition determined UK economic performance are important components in explaining the economic weaknesses that Northern Ireland exhibited prior to the arrival of DMCL. At the theoretical level, recent research indicates that industrial policy should be implemented in a way that promotes competition.⁴⁹ Along these theoretical lines, Aghion et al (2012) demonstrate that subsidies should not be concentrated on a particular firm in a particular industry. Instead, their formal analysis suggests that industrial policy is more likely to promote growth if subsidies are offered on an equal footing to more than one firm.⁵⁰ They conclude that the focus of industrial policy should be to be to design sectoral policies in order to promote a more competition-friendly and high-growth outcome.

In political economy terms, the less concentrated (and more competition-friendly) the allocation of state aid to a particular sector is, the less incentive there will be for any firm to lobby for that aid. The analysis of competition and industrial policy provided by Aghion et al indicates that competition-friendly industrial policy will minimise the resources devoted to lobbying. Thereby the waste associated with rent-seeking will be minimised if industrial policy promotes competition. The theoretical framework developed by Aghion et al complements the more applied approaches to the relationship between competition and economic outcomes. Crafts' recent work on long-run UK economic performance acknowledges that failures in educational, fiscal and monetary policy as well as shortfalls in human and physical capital accumulation have all contributed to poor performance.⁵¹ However, Crafts argues that competition deserves more prominence in the economic history literature.⁵² He identifies the weakness of competition from the 1930s to the 1970s as undermining British productivity growth.⁵³ Moreover, Crafts demonstrates that since the late 1970s a greater policy emphasis on competition has promoted supply-side improvements that have ended relative economic decline.⁵⁴

There is an important political economy component within the approach taken by Crafts: he recognised that securing higher productivity may be good economics, but 'it may be quite challenging' politically to get interest groups to see how the benefits of 'creative destruction' outweigh the losses to themselves.⁵⁵ This political economy focus is particularly pertinent to solving the puzzle of DMCL's failure. Crafts' analysis of the role of competition in explaining relative UK economic decline (and renaissance) relates to his earlier findings on the sources of Northern Ireland's failure to keep pace during the Golden Age.⁵⁶ Crafts observed the existence of 'a rather worse version' of Britain's industrial relations and the disadvantages associated with 'soft' peripherality (such as access to information) hindered business in Northern Ireland. He contended that industrial policy failures compounded the

situation.⁵⁷ Such observations are consistent with claiming that by the 1950s the Northern Irish economy faced a region-specific set of problems. Not only did magnified versions of British weaknesses exist, but also obstacles unique to the region also tended to reduce productivity growth.

Crafts identified that a 'political economy context' influenced the region's observed efficiency failures.⁵⁸ However, he did not explain why the incentives facing politicians and policy agencies were so perverse. Brownlow provided such an explanation by studying the archival sources and applying rent-seeking analysis.⁵⁹ He observed that (and unlike in Britain) there was minimal oversight of the disbursement of grants in Northern Ireland. Such a situation after 1945 was of advantage to local political leaders with commercial interests in declining industries seeking subsidies. Beneficial institutional change occurred in 1963; Northern Ireland's regulations governing conflict of ministerial interests were brought into line with Britain's. Empirical evidence indicates that such institutional changes (combined with a more generous industrial policy) were associated with a boost to the quantity and quality of inward investment that raised economic performance between 1963 and 1972.⁶⁰

Prior to the arrival of DMCL, there were three interrelated categories of economic problems within Northern Ireland. A first set of problems were the supply-side weaknesses that it shared with the rest of the UK. Failures of macroeconomic policy can be placed in this category. A second category of problems involved magnified versions of weaknesses found in the rest of the UK. Unemployment was for example a much greater problem than elsewhere in the UK. Long-term unemployment was particularly acute.⁶¹ Competition was weaker than in Britain during the Golden Age. The Safeguarding of Employment Act, 1947 for example prevented the free flow of workers from Britain.⁶² Only when the UK joined the Common Market was the Act reversed. The politically powerful linen industry hindered restructuring by attempting to act as a monopsony in segments of the female labour market.

The detrimental consequences of weak competition are mentioned in the pioneering *Economic Survey of Northern Ireland* (1957).⁶³ Isles and Cuthbert, the authors of the survey, argued that both management and workers required greater efficiency and that restrictive practices needed to be eliminated.⁶⁴ They suggested that weak competition – in the form of entry barriers - hindered the regional economy:

The limited size of the provincial market for many goods and the ease with which in some trades petty monopolies can be formed, at any rate in sheltered trades, may have helped to develop an attitude of mind which prefers safety though restriction to the chance of prosperity through enterprise and growth.⁶⁵

Isles and Cuthbert were particularly concerned that the ‘attitude of restriction’ would be particularly damaging in industries that served other sectors.⁶⁶ Monopoly and restrictive practices for example beset the coal trade.⁶⁷ A third group of economic problems were those unique to the region’s circumstances. The negative economic effects of peripherality (particularly in its ‘softer’ form) could be placed in this category. It has been suggested that soft peripherality acts as an obstacle to prosperity, because Northern Ireland lagged economically it made it difficult for businesses to find the funds and/or access the information needed to keep pace with competition in Britain. This alleged inability to create up-to-date goods and services, associated with economic backwardness caused by isolation, in turn further hinders regional competitiveness. Soft peripherality is claimed to be associated with cumulative causation as initial disadvantage can breed long-term disadvantage.⁶⁸ Likewise, after 1969 the economic implications of civil unrest would further damage an already weak regional economy.

Narrative: the institutional and economic environment, 1971-1978

Having outlined the relevant analytical issues in terms of the distortions that emerged prior to the 1970s, we can now turn to interpreting the historical narrative. On the security side, violence by the middle of the 1970s was starting to decline from the peak levels of the early years of the Troubles. Figure 1 illustrates this trajectory.

[Insert Figure 1 here]

Investment, particularly inward investment, was particularly weak after 1969, but the extent to which this weakness was due to violence rather than a legacy of the excessive reliance on a 'branch plant syndrome' is part of a wider counterfactual debate beyond the direct focus of this paper.⁶⁹ Applying the allocation of talent model mentioned earlier to the situation we could hypothesise that violence reduced the economy's growth potential and increased the social wastefulness associated with rent-seeking. As outlined in Table 4, an important complication to addressing this bleak economic picture was the uneven distribution of unemployment between the two communities. This situation, with its security and political implications, made British governments after the introduction of direct rule in 1972 particularly eager to create jobs in areas with large concentrations of Catholic unemployed. An estimated unemployment rate of 80 per cent in the housing estates neighbouring Dunmurry existed.⁷⁰

[insert Table 4 here]

The Northern Ireland Development Programme, 1970-75, published in 1970, and which outlined a strategy for economic progress, was increasingly irrelevant after the upsurge in violence that accompanied the introduction of internment in August 1971.⁷¹ The intensification of violence led to the commission of the Cairncross report. The Cairncross report recognized that violence, with its resulting collapse in investor confidence, was hindering the development of existing and potential investment. The report diagnosed that private sector entrepreneurship needed support. The authors prescribed the creation of Northern Ireland Finance Corporation (NIFC) to support investment as ‘a lender or subscriber of the last resort’. Endowed with a £50 million fund, the NIFC was to offer loans and guarantees. It would provide funds to what officials regarded as sound businesses (primarily manufacturing enterprises) threatened with closure or contraction due to violence.⁷² The report advocated bringing forward public expenditure as a supplementary measure.

The organisational architecture under which industrial policy operated changed after the introduction of direct rule. The NIFC was replaced with the Northern Ireland Development Agency (NIDA) in May 1976 and a new Northern Ireland Economic Council (NIEC) was created to advise the Secretary of State. The Cairncross analysis was also updated and its interventionist prescription was extended by Belfast based officials in an ‘Economic and Industrial Strategy for Northern Ireland’ (henceforth the Quigley report) published in 1976. Investment levels, according to this report, were not going to increase ‘until the psychological barrier presented by the security and political situation has been lifted’.⁷³ However, the analysis within the Quigley report was more interventionist than in Cairncross. For example, the authors concluded that it was ‘inevitable that the State should

itself assume the role of entrepreneur'.⁷⁴ The report claimed that the public sector would pick winners as it could take greater risks than the private sector and it could ensure that jobs were located in locations that private enterprise would not choose. Such interventionist arguments provided a manifesto for officials supporting DMCL. However, the shift towards intervention also had an adverse selection implication, as it left officials vulnerable to opportunistic entrepreneurs (such as John De Lorean) who discovered that securing generous subsidy packages was an easier task in Northern Ireland than elsewhere.

Narrative: Enter De Lorean

Journalists have attributed the failure of DMCL to John De Lorean's switch between Jekyll and Hyde behaviour variously to 'delusion', a 'narcissistic personality' driven by an 'exaggerated sense of entitlement' combined with 'a sense of reality...distorted beyond reason'.⁷⁵ De Lorean became 'a prisoner of his own vision' in the words of one of these accounts.⁷⁶ Such psychological speculations, while making for entertaining journalism, do not offer a particularly insightful way of solving the puzzle of the firm's failure. The narrative material in the remainder of this paper demonstrates that the political economy insights presented earlier in the paper provide a more convincing explanation.

De Lorean is a particularly interesting example of the Jekyll and Hyde tendencies identified in the earlier analytical sections of this paper. His example is one that offers interesting insights for an economist interested in applying Public Choice insights to business history. As an entrepreneur, De Lorean responded opportunistically to a set of incentives based on the desperation of officials and politicians for inward investment; this opportunistic

behaviour involved rent-seeking activity. Once located in Dunmurry, he tried to manipulate institutions to his commercial advantage. For example, the original contract that De Lorean negotiated regarding locating DMCL in Dunmurry was legally vague enough that he could use provision 4(j) as a bargaining chip to extract further concessions, even going to the extent of attempting to use legal threat to get additional money.⁷⁷ De Lorean combined the ability to innovate, with an intense ability for lobbying and legalistic manoeuvring.

Even his sternest critics, a category that includes the same journalists who attributed his failure to a narcissistic personality, acknowledge he had engineering skills that approached genius.⁷⁸ De Lorean held 52 patents at the US Patent Office (31 were for GM) when he created his ill-fated car firm.⁷⁹ De Lorean's undoubted engineering ability and associated capacity for productive entrepreneurship, as demonstrated by his many patents, was therefore not in doubt by the time he formed DMC. Yet even at the time of peak sales for the DMC-12, expenditure on legal fees exceeded the advertising budget.⁸⁰

He was also a consummate rent-seeker able to engage in unproductive and destructive forms of entrepreneurship. The GPD Services Incorporated (GPD) episode as well as his involvement in a cocaine deal demonstrated his propensity for illegally evading institutions.⁸¹ De Lorean's use of the political situation in order to secure further grants was a clear attempt at legally altering institutions.⁸² Moreover, he was extremely opportunistic in his behaviour before, during and after his tenure at GM. His talent for political lobbying was impressive but - as in the case of his negotiations with the Irish Republic's Industrial Development Authority (IDA) - he could miscalculate. De Lorean located production in Dunmurry. He did not locate in Puerto Rico or the Republic of Ireland because the oversight in Northern Ireland was weaker and crucially the subsidy package was more generous: it was easier to secure rents, and the rents on offer were greater than the alternatives.

A 1977 confidential report conducted by the First National Bank of Chicago presents probably the most prophetic, and certainly the most damning, investment analysis of DMC. The report was conducted on behalf of Ojje Akram, a potential Saudi investor in the project when it was still to be located in Puerto Rico.⁸³ First National suggested that, in a world of high oil prices, the market for cars had changed. Consequently, an 'ethical' sports car of the type De Lorean was going to produce would not have adequate demand.⁸⁴ Hobbled by weak demand prospects and potentially strong cost and competitive pressures, the report concluded that shareholders equity would show a deficit of \$20-25m.⁸⁵ Predictably, Ojje Akram walked away from the deal at the end of April.

De Lorean by 1978 had repeatedly tried to bend the rules to his own advantage. Such bending was legal in some cases, but it was illegal in other cases. De Lorean's agreement-bending tendencies extended to contracts: 'John always felt contracts were interesting pieces of paper and no more' as one former colleague succinctly expressed it.⁸⁶ De Lorean's repeated statements that marketing was the most important determinant of motor industry success provides an additional explanation for professional investor scepticism.⁸⁷ Conversely, De Lorean's gift for marketing, his high profile image as an entrepreneur and high profile lifestyle attracted high profile investors from the entertainment industry: Sammy Davis Jr. and Johnny Carson were two celebrity investors.⁸⁸ John De Lorean's chequered business career, flamboyant image, marketing focus and extravagant reputation as well as the commercial failure in 1975 of the Bricklin SV-1 were all contributing factors in deterring many institutional investors.⁸⁹

Public sector agencies competed to attract this inward investment venture. The relatively rapid pace of the negotiations may provide a partial explanation for the substantially better deal that De Lorean secured from the NIDA. He played cat and mouse with Fomento for 18 months. The IDA considered the project for five months before rejecting

it. The three deal-breakers for the IDA were, firstly, De Lorean's claim that he wanted the firm to be an adjunct of Ford and Chrysler, manufacturing a separate line of luxury sedans and sports cars.⁹⁰ Secondly, the IDA had well worked out vetting procedures.⁹¹ Thirdly, De Lorean miscalculated in his negotiations aimed at securing rents from the IDA: while Desmond O' Malley, the Irish industry minister, was keen on the project, De Lorean's lobbying of the industry minister annoyed senior IDA officials, and O'Malley's influence was not what De Lorean assumed. Ministers did not make the final decisions at the IDA and De Lorean's aggressive lobbying cemented the IDA's rejection.⁹²

It took 46 days, from initial introductions to formal contracts, to persuade the British government to dip into their coffers to locate the firm in Dunmurry. On June 21 1978 between the Department of Commerce, NIDA and the De Lorean Motor Company an agreement was established.⁹³ De Lorean's firm between 1974 and 1978 had raised barely \$5 million; in the span of a month and a half, the coffers had swelled twenty-fold.⁹⁴ While De Lorean would tell the media the financial incentives for locating in Northern Ireland were attractive, he would also suggest they were not compelling. Yet they were approximately three times as much as the IDA offer and twice those in Puerto Rico.⁹⁵ That was more than enough compulsion (or additional rent) for De Lorean.

How exactly the project eluded the grasp of Puerto Rico remains somewhat murky, but it is sufficient to note that De Lorean, despite signing an exclusivity agreement with Puerto Rican authorities, attempted to wrangle better deals. Senior officials from the Department of Commerce and the NIDA, as well consultants from McKinsey acting on behalf of the NIDA, studied De Lorean's corporate plan. The board of NIDA approved the project on July 13th 1978.⁹⁶ The NIDA's formal offer of assistance occurred in August 1978 (an offer amended in April 1979).⁹⁷ The formal offer bound the NIDA to consider making

further loans to the firm in the case of events beyond the control of the firm (the formal documentation explicitly mentions factors such as exchange rates and interest rates).

The McKinsey commentary on the corporate plan placed the chances of DMCL managing to succeed, on the terms De Lorean had projected, at around 40 per cent.⁹⁸ McKinsey suggested that the scale of the public investment was a large risk. Demand for the vehicle was uncertain and the supply-side risks were associated with high sunk costs. They observed that should the business fail then neither the £24 million machinery budget nor the factory space itself had much in the way of commercially viable alternative uses. Anticipating the Treasury's misgivings about the project, the initial employment grant of £10m implied a fully employed cost per worker of £6500, which was extremely expensive.⁹⁹ The commentary angered De Lorean sufficiently that his legal representative sent an aggressively worded telex in response. The McKinsey assessment was described as 'a monument to the non-entrepreneur, who takes no risks and, therefore, never makes a mistake'.¹⁰⁰ A more measured response occurs in De Lorean's formal written response. That document forecast that 30,000 units were to be sold at a price of \$11,000 (or 9,000 units at \$16,000). Estimated breakeven production for 1982 was 15,100 units.¹⁰¹

De Lorean's figures were to prove wildly optimistic. Supporters of the project could nevertheless point to the fact that the firm had commissioned such projections based on feasibility and market studies undertaken by a range of consultants, including Booz Allen Hamilton.¹⁰² Senior officials assessed any risks identified by McKinsey as being more than offset by the potential benefits.¹⁰³ De Lorean's forecast projections were considered plausible.¹⁰⁴ An internal memo, authored by George Quigley, the Permanent Secretary at the Department of Commerce, assessed the project's potential advantages and disadvantages; it came down very clearly on the positive side.¹⁰⁵ Support for the project was summarised as follows:

‘Having looked the risks squarely in the face, the issue is simply whether the potential prize justifies the measure of risk clearly entailed. At the end of the day, this *is primarily a political decision*. My view would be, however, that, having regard to all the circumstances, the risk is justified’ My Italics.¹⁰⁶

De Lorean’s autobiography tends to exaggerate the role that Roy Mason, the Secretary of State of State for Northern Ireland 1976-79, played; likewise, Mason’s autobiography defends the role he played in the episode. Mason argued that bringing De Lorean to Dunmurry was ‘one of the best things I ever did’.¹⁰⁷ Of course, these autobiographies had clear motivations in extolling the virtues of Mason as a Secretary of State. Mason’s contribution was unarguably an important one as he helped transform Stormont enthusiasm into Whitehall cash; Mason was not actively involved in the negotiations. Furthermore, by no means was he the intellectual or administrative driving force for attracting De Lorean. Senior officials gave Mason the impetus. For instance, John Freeman, Deputy Chairman of the NIDA, invoked the Quigley analysis to encourage Mason to support the project.¹⁰⁸ Mason transmitted this interventionist message to the Treasury. As outlined in a letter to the Chief Secretary, Mason claimed that, by creating jobs in West Belfast, the project had political, economic and security benefits.¹⁰⁹ Joel Barnett for his part, expressing Treasury scepticism in the increasingly interventionist (and expensive) direction of industrial policy, countered with the worrying precedent of Strathearn Audio.¹¹⁰

Narrative: DMCL in Dunmurry, 1978-1982

The vehicle finally made its public debut at the Ulster motor show in February 1981, and began its full-scale production the same month, but privately the British government had already lost faith in DMCL. The Treasury for its part argued the whole saga was connected to failures of forecasting and control at the Northern Ireland Office (NIO) as well as the limits of DMCL.¹¹¹ As early as June 1980 the British government considered letting the firm collapse. The legal opinion at this stage was that the original contract left the government vulnerable if it refused to assist.¹¹² However, it was political rather than legal or commercial considerations that kept the money flowing into DMCL.¹¹³

The engineering and financial aspects of the relationship with Lotus and GPD, a Swiss-Based company, are of particular importance in explaining the failure. On the financial side, the pace at which government money flowed to Lotus was in greater quantities than anyone expected. Research and development work undertaken for DMCL was supposed to be paid to Lotus via GPD. A total of US \$17.65 million (some £8.83 million) found its way to GPD following this route. DMCL paid GPD/Lotus a second pot of money, worth \$23 million (£11.5 million) for additional development work. It was discovered subsequently that none of this first pot of money had been received by Lotus.¹¹⁴ In terms of the engineering part of the business, many of the subsequent design and quality control problems arose because of disagreements between engineers at Lotus and DMCL.¹¹⁵ Predictably, these disagreements caused quality control problems that in turn raised costs in order to make the car of saleable quality. These additional costs, compounded by the excessive executive pay and general extravagance of the business, contributed to making the firm extremely uncompetitive.¹¹⁶

Table 5 illustrates the failure of the firm to create the promised jobs for much of its life.¹¹⁷ Ironically, by the time the firm was employing approximately the promised level of workers it was clear that the pessimistic forecasts of investment analysts were accurate: too many cars were coming out of the factory gates awaiting too few buyers.

[Insert Table 5 here]

By December 1981, it was clear that while weekly production targets of 400 were being met there was insufficient demand.¹¹⁸ Fallon and Srodes aptly describe De Lorean's negotiating tactics with the NIDA and British government as a combination of 'pleading, threatening or blackmail', and they observe that as time wore on it became a steadily less effective combination.¹¹⁹ However, Fallon and Srodes do not provide an explanation for this diminishing effectiveness: one clue is that De Lorean was well aware that the more workers hired at DMCL, the harder it was politically to close the venture. On the other hand, he must have equally been aware that a larger workforce with greater production implied even higher levels of unsold cars and higher costs.

De Lorean became ever more desperate as sales stagnated, the firm's cash flow worsened and it seemed likely the car would never reach the market. Behind the scenes in Stormont and in London, he used legalistic bargaining lobbying in an attempt at extracting further concessions. Simultaneously he used his high media profile for the same ends. In his media utterances, he increasingly blamed civil unrest for his commercial problems. Civil servants drafted press releases and rebuttals to these public utterances.¹²⁰ In private negotiations with the British government, De Lorean argued that as the physical assets were government-owned, until the car reached the market, the firm had no security for a loan and hence £13.7 million was required if the factory gates were not to be closed.¹²¹ Both parties were well aware that the sum would not be enough to get the car to the market, but the government were more pessimistic.¹²²

In negotiation, the Secretary of State explained that if the Conservative government had been presented with the same proposition as their predecessors they may well have said

no, but after due consideration they agreed under certain conditions. Namely, the loan was to ensure that the car could come to the market in December 1980 or January 1981, but that additional sums needed to be raised elsewhere.¹²³ The loan was a mixed blessing for De Lorean. The loan helped alleviate the immediate cash flow problem; it made the firm liable for interest rate payments. A McKinsey monthly progress report by October 1980 predicted that market launch had slid further back to March 1981, but even that assessment could be overoptimistic.¹²⁴ Furthermore, the dealership system was not holding together. The estimated selling price by October 1980 was now \$25,000 (or 227 per cent of the original nominal estimated selling price).¹²⁵ Moreover, De Lorean by November 1980 was refusing to adhere to NIDA's instructions for him to abandon the Transbus project.¹²⁶

The firm's cash flow problems, excessive cost base and weak demand became more and more apparent. Bank of America by January 1982 was no longer willing to provide export financing lending the money against the collateral of actual cars once they were shipped from Belfast. Bank of America invoked a safety clause that connected its lending to the sales volume generated by dealers. The poor (and declining) sales led the export credit offered to fall from \$47 million to \$24 million and soon after Renault cut off its credit for engines. De Lorean's last attempt at getting UK taxpayer support was to lobby unsuccessfully the Export Credits Guarantee Department (ECGD). In a final characteristic of extravagance, for a firm under receivership, De Lorean summoned his board back from Belfast to New York. The seven directors flew in Concorde at a total cost of £15,000.¹²⁷ DMCL went into receivership in February 1982. Production ceased in May 1982 with a mere 200 staff kept on to service existing cars until the plant closed in October 1982.¹²⁸ By November 1982 the firm was wound up and liquidators were appointed. DMC limped on until it too was forced into liquidation by the US courts in December 1983.¹²⁹

As DMCL faltered, and the gap between promised and actual performance widened, so the political and economic sunk costs declined in importance. The failure of the firm to secure orders sufficient to match production ensured that a major plank of De Lorean's argument for investment disappeared; furthermore, as the firm's credentials as a potentially large employer of Catholics receded, and the accompanying political costs to Secretaries of States supporting the venture increased, so the bargaining power of DMCL declined. In terms of commercial sunk costs, the Conservative government became less and less convinced that this rationale provided a good one to continue subsidy. As the commercial problems of the firm intensified, so the influence of sceptics in the Treasury (and hence within Whitehall and Westminster) increased. Bargaining power hence shifted against further subsidisation.

De Lorean's declining effectiveness in bargaining for additional subsidy has been noted by journalistic commentators.¹³⁰ De Lorean was fond of telling colleagues in New York that he had the British government 'over a barrel'.¹³¹ The political sunk costs of closure were unarguably huge for the British government. Likewise, the damage to the region's image as an investment location as well as the commercial sunk costs discussed by McKinsey raised further the prospective direct and indirect financial costs of failure. The supposed net benefits of the project helped initially override the Treasury's scepticism. Greater initial scepticism would at the very least have made the subsidy package subject to tougher monitoring and restrained the business. The structure of the payoffs initially gave De Lorean a high degree of ability to secure rents (and a correspondingly large subsidy); his bargaining power declined between 1978 and 1982 and a new equilibrium emerged in which his access to rents dissipated; without these subsidies, the enterprise folded.

Narrative: some industrial policy lessons

As noted earlier in the paper, solving the specific puzzle of the failure of DMCL relates closely to explaining the more general puzzle: namely, the overall failure of Northern Irish industrial policy. Since the 1970s and 1980s, the relative dangers of market and government failure have influenced academic discussion on the merits of industrial policy.¹³² Public Choice would suggest that rent-seeking behaviour, as well as more general government failure considerations, could prevent successful industrial policy. From a comparative institutional perspective, we observe that industrial policy varies internationally in terms of its relative success. In particular, in the real world such policies always emerge within a world of second-best institutions. Policymakers, rather than implementing a fixed menu of first-best/ best-practice policies need to take account of how proposed solutions affect multiple distortions.¹³³ Binding constraints can be removed in a variety of ways, some of which may be more politically feasible than others. Furthermore, binding constraints can evolve over time. The best-practice approach ignores context and downplays the institutional complications of real world policymaking. In contrast, the second-best institutional approach provides a more appropriate institutional context to the design and implementation of industrial policy.¹³⁴

Recent work on the political economy of industrial policy, which covers both developing and developed economies, indicates that the political equilibrium of a society (and/or institutional stickiness) determines the effectiveness of particular policy choices.¹³⁵ Hence, given political equilibriums, policymakers can try to either alter the equilibrium or work within the institutional environment generated.¹³⁶ As Robinson has observed, while there are government failure problems inherent in designing and operating industrial policy, successful policy must be more likely when there is a clear focus on efficiency outcomes.¹³⁷

This recent line of argument explains why more successful policy models did not emerge during the Troubles, but did elsewhere.

The South Korean experience provides an example of a more successful alternative, if also imperfect, model for industrial policy. In this case, while scholars disagree about aspects of the industrial policy regime, there is consensus that it was a successful and well-targeted set of policies. It has been argued by advocates of the “developmental state” thesis that intervention (via subsidies, trade restrictions, administrative guidance, public enterprises or credit allocation) explains the success of its industrial policy.¹³⁸ Other assessments of the strengths and weaknesses of South Korean industrial policy take a more sceptical view of the “developmental state” thesis.¹³⁹ However, these alternative approaches suggest that factors such as favourable human capital endowment and a relatively equal income and wealth distribution as well as other policies related to export-led industrialisation help explain the success. For example, the absence of large-scale inequalities in South Korea ensured that the political pressure for redistribution, which could easily descend into rent-seeking, was diminished. Moreover, a dedicated bureaucracy further acted to restrain rent-seeking.

Moreover, imitation of successful industrial policy may not be possible outside of the context it arose. Crafts has observed that the political-economic conditions that South Korean industrial policy model operated within might not be applicable in the case of an economy facing deindustrialisation.¹⁴⁰ If Crafts is correct, then a successful imitation of the South Korean model would not have been possible in Northern Ireland for a variety of reasons. Firstly, industrial decline, compounded by political unrest, was the relevant political-economic equilibrium. The Northern Irish industrial policy model, as it evolved during the 1970s, and as exemplified by DMCL, represented one that relied to greater extent than the South Korean model on attracting mobile inward investment projects. Such a model of industrial policy has been found wanting elsewhere.¹⁴¹ Secondly, in contrast to the South

Korean conditions, the very existence of deep-rooted inequalities and sectarianism gave rise to the De Lorean project. Moreover, industrial policy in the Northern Irish context could not merely focus on promoting economic efficiency: as it had political and security objectives connected to employment creation. Overall, as exemplified by the case of DMCL, the desperation for inward investment created opportunities for rent-seekers. South Korea's favourable investment environment was in contrast able to restrain rent-seeking. This favourable institutional environment could not have been replicated easily in the Northern Irish case.

Conclusions

In terms of specific lessons from the rise and fall of DMCL, this paper has demonstrated that institutional structures and the ability to engage in rent-seeking take us further in providing an answer to the puzzle of DMCL's failure than do narratives that rest solely on the personality flaws of its founder. More generally, in a world where rent-seeking exists and institutions are second-best, a Whiggish approach to business history is historically misleading as well as economically ill-informed. It is for good reason that industrial societies have recognized that different kinds of firms are simultaneously agents of innovation and predation.¹⁴² Business survival, under certain institutional configurations, and the associated wealth of an entrepreneur, indeed may actually involve social waste.¹⁴³ Moreover, entrepreneurs may not take the institutional environment as given. Attempts at alteration or evasion of existing institutions can be illegal or legal. Findings surrounding institutions and entrepreneurship are particularly important for those scholars who suggest that that any 'new

business history' should seek to explain how different jurisdictions have come to consider the firm as a socially and morally responsible actor.¹⁴⁴

Responding to the recent invitation presented by de Jong, Higgins and van Driel, the evidence presented in this paper indicates that Whiggish narratives of business history should be replaced by accounts that incorporate and allow for more generalizations from institutional analysis. For example, historical puzzles can more easily resolved if the analytic narrative approach is followed; likewise, while case studies need to be retained by business historians, there is scope for a range of other empirical methods. As noted in the introduction, economic historians are being encouraged to shift towards a policy-driven approach.¹⁴⁵ Business historians should learn from this shift. By offering insights for the conduct and design of contemporary industrial policy, based on archival analysis informed by modern economic reasoning, business historians may help ensure a healthy future for the discipline. In the process, they will create a 'new business history' as called for by de Jong, Higgins and van Driel that more closely matches the needs of contemporary business and policy-makers.

Table 1. Classifying Four Approaches in the Social Sciences

	“Dirty” Empirical Work	“Clean” Empirical Work
Thin Description	ANALYTICAL NARRATIVE	Standard economics analysis <ul style="list-style-type: none"> • Constrained optimization • Statistical significance
Thick Description	Traditional anthropological, sociological, area studies political science work <ul style="list-style-type: none"> • Social forces and cultural analysis • Case study and ethnography 	Statistical Sociology and political science <ul style="list-style-type: none"> • “Kitchen sink” statistical analysis which throws everything in the right side of the equation in search of explaining the left side

Source: Boettke, “Review”, 378.

Table 2. Factors Encouraging Rent Seeking and Productive Entrepreneurship

	A) FACTORS MAKING RENT SEEKING AN ATTRACTIVE CHOICE	B) FACTORS MAKING ENTREPRENEURSHIP AN ATTRACTIVE CHOICE
1. Market Size	Large resources go to "official", rent-seeking sectors, such as the government, army, or religion. Poorly defined property rights make wealth accessible to "unofficial" rent seekers. Large Wealth that is up for grabs, especially relative to smaller goods markets.	Large markets for goods. Good communications and transportation that facilitates trade.
2. Firm Size	Substantial authority and discretion of rent seekers (such as government officials, army etc) enable them to collect large sums unhindered by law or custom.	Easy entry and expansion, few diminishing returns in operations, access to capital markets.
3. Contracts	Ability to keep a large portion of collected rents. In firms, observability of output that yields appropriate rewards.	Clear property rights, patent protection. No expropriation of rents by rent seekers. Ability to start firms to collect quasi rents on talent.

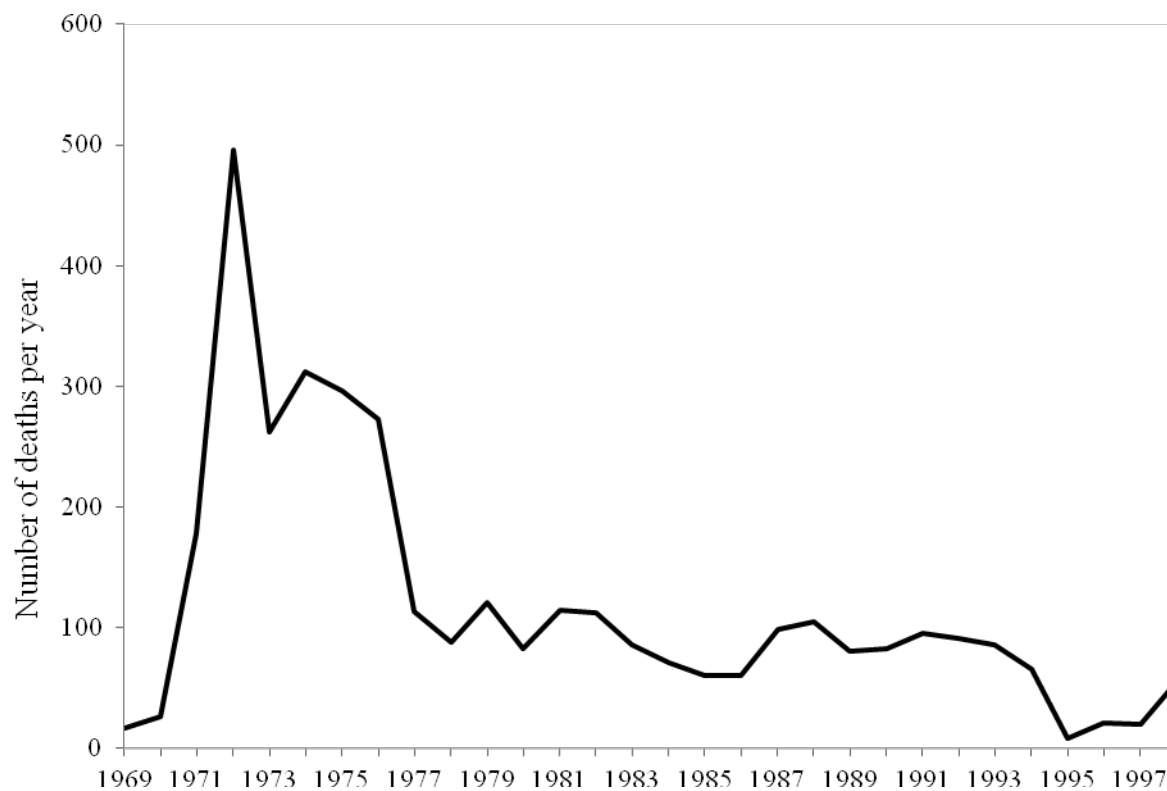
Sources: Murphy, Schleifer and Vishny, "The Allocation of Talent", 519.

Table 3. A Typology of Entrepreneurship and Some Illustrative Examples

	ABIDE	EVADE	ALTER
PRODUCTIVE	Pursue a business opportunity within prevailing institutions.	Sidestep stifling labour market regulations through a new contractual form.	Provide a new local public good, private security firms.
UNPRODUCTIVE/DESTRUCTIVE	Sue competitors for a share of the profit. Rogue states; rivalry between warlords.	Bribe a government official to obtain a contract. Illegal syndicates.	Lobby for a new regulation to protect an industry. Repeal property rights to plunder a wealthy group.

Source: Henrekson and Sanandaji, "Interactions", 53.

Figure 1. Deaths and injuries (numbers) due to the security situation in Northern Ireland, 1969-1998



Source: data taken from McKeown, Michael. (2009). Database of Deaths Associated with Violence in Northern Ireland, 1969-2001, (Version 1; dated 16 June 2009), [Microsoft [Access Database](#); 1650KB]. Web: CAIN.

Table 4. Unemployment Rates (%), 1971-1991

	Protestant (Male)	Protestant (Female)	Catholic (Male)	Catholic (Female)
1971	7	4	17	7
1981	12	10	30	17
1985-7	14	9	36	15
1991	12	7	28	14

Notes: Derived from census reports for 1971, 1981 and 1991; continuous Household Survey data for 1985-7

Source: Boyle and Hadden, *Northern Ireland*, 44.

Table 5. Projected and Actual Hiring Schedule for DMCL, 1979-1982

Year	Quarter	Projected number of workers hired	Actual numbers of workers employed in Dunmurry
1979	1	90	-
1979	2	120	-
1979	3	180	-
1979	4	283	-
1980	1	505	-
1980	2	780	-
1980	3	1214	265 (including 23 on short-term contracts and 16 hourly paid)
1980	4	1404	430 approx
1981	1	1497	865
1981	2	1734	-
1981	3	1810	1600 approx
1981	4	1810	-
1982	1	-	2500 approx
1982	2	-	1500 approx 200 by May 1982

Notes: Projected employment figures (1979-81) taken from PRONI DMS/2/129 file entitled 'IR Intelligence De Lorean Motor Cars Ltd' held at PRONI, Belfast. The fourth quarter 1980 and first quarter actual employee numbers 1981 taken from Fallon and Srodes *De Lorean*, 284. Third quarter data 1981 taken from Ibid, 303. First and second quarter data for 1982 taken from Ibid, 413-4 and 431.

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- ¹ Hume, “Of the Independency of Parliament”, 40-42.
- ² Quote attributed to De Lorean as an undergraduate. See Levin, *John DeLorean*, 26.
- ³ David Healy, Wall Street automobile analyst, cited in clipping from *The Irish Times* January 20, 1979 taken from Public Record Office for Northern Ireland (henceforth PRONI) DMS/2/129 “IR Intelligence De Lorean Motor Cars”, PRONI, Belfast.
- ⁴ De Jong et al., *New Business History?*
- ⁵ Lamoreaux, Raff and Temin, “Economic Theory and Business History”; Morck and Yeung, “Economics, History and Causation” ; De Jong, Higgins and van Driel., *New Business History?*, Jones, van Leeuwen and Broadberry., “The Future of Economic, Business and Social History”.
- ⁶ De Jong, Higgins and van Driel, *New Business History?*
- ⁷ On the need for renewal see Jones et al., “The Future of Economic, Business and Social History.”
- ⁸ Crafts, *Economic History Matters*; Eichengreen, *Economic History and Economic Policy.*”
- ⁹ Gras, “Are You Writing a Business History?”, 73.
- ¹⁰ Fridenson, “Business Failure and the Agenda of Business History.”
- ¹¹ Ibid; Lamoreaux, Raff and Temin, “Economic Theory”, 38.
- ¹² Buchanan, *What Should Economists Do?* 184.
- ¹³ Ibid, 178.
- ¹⁴ Mueller, “Constitutional Public Choice”, 124.
- ¹⁵ The rent-seeking concept stems from the analysis laid out originally by Gordon Tullock (“The Welfare Costs of Tariffs, Monopolies and Theft”). However, the term was first used by Krueger (“The Political Economy of the Rent Seeking Society”). The term applies to a situation when an agent seeks to ‘obtain an artificial transfer, usually from government, and covers all the actions, efforts or expenses that the agent has to carry out to obtain the prize. The key issue, however, is the possible social waste that arises in these situations’, Del Rosal, “The Empirical Measurement of Rent-Seeking Costs.”, 299. It represents social waste because it reallocates resources towards unproductive rather than productive activities.
- ¹⁶ Buchanan, “Rent Seeking and Profit Seeking.”
- ¹⁷ Fielding, “Investment, Employment and Political Conflict.”
- ¹⁸ Fallon and Srodes provide a figure of \$14 million. Fallon and Srodes, *DeLorean*, .397; Levin puts the figure at \$16 million *John DeLorean*, 6.
- ¹⁹ We follow the practice of the official NIAO report and use John De Lorean’s own preferred presentation of his surname name rather than the more conventional ‘DeLorean’ used in the journalistic literature.
- ²⁰ NIAO, *De Lorean*.
- ²¹ “De Lorean Motor Company” in undated document entitled “De Lorean Motor Company, Background Note Capital Structure”, PRONI DED/21/6/1, undated, PRONI, Belfast.
- ²² Ibid. Clipping made from article in *Marketing Week* entitled ‘De Lorean: bumpy ride ahead’ dated July 28 1978, PRONI DED/21/6/1, PRONI, Belfast.
- ²³ Crafts, *Economic History Matters*.
- ²⁴ Rodrik, *In Search of Prosperity*.
- ²⁵ Coase, “The New Institutional Economics.” A textbook definition identifies it as a school of thought ‘that builds on the work of Coase, North and Williamson. In general, the approach takes an efficiency perspective and focuses on individual actors, who are characterized by bounded rationality and (possibly) opportunistic behaviour’, Groenewegan, Spithoven, and Van Den Berg, *Institutional Economics*, 374.
- ²⁶ Boettke, “Review.”
- ²⁷ Bates et al., *Analytic Narratives*, 11.
- ²⁸ Bates et al., “The Analytical Narratives Project.”, 698.
- ²⁹ Dessler, “Analytic Narrative.”
- ³⁰ Bates et al. , “Analytical Narratives Revisited.”, 691.
- ³¹ Alexandrova, “When Analytic Narratives Explain”, 2.
- ³² Levi, “An Analytic Narrative Approach”.
- ³³ North and Weingast, “The Evolution of Institutions”; Greif, “Cultural Beliefs”.

³⁴ Drelichman builds on Rodrik's second-best approach to institutions, which states that apparently inefficient institutions might actually improve economic efficiency if other distortions are present, to consider the Spanish Mesta. Drelichman argues theoretically and produces convincing empirical evidence that the Mesta represented a second-best institutional arrangement. Koyama revisits the medieval prohibition on usury. The paper suggests that prohibition was a by-product of regulatory capture. Koyama develops a formal model and historical discussion that links higher interest rates to groups - including rulers, merchant-bankers and the Church - that could capture rents. Moreover, Koyama suggests that usury prohibition was a self-enforcing institution. Rubin considers bills of exchange and the existence of different equilibria concerned with impersonal exchange emerging under different conditions. In one case, which pervaded the Middle East, lending remained based around social-personal networks. In the other 'Western European' equilibrium, such personal financial networks were replaced by impersonal markets. Rubin speculates that Middle Eastern relative underdevelopment was in part the consequence of the continued reliance on personal-familial relations in the market for long-distance finance. See Drelichman, "Licence to Till"; Koyama, "Evading the 'Taint of Usury'" and Rubin, "Bills of Exchange". For general points along these lines see Rodrik, "Second Best Institutions."

³⁵ Ingram, Rao and Silverman, "History in Strategy Research."

³⁶ Baumol, "Entrepreneurship: Productive, Unproductive and Destructive."

³⁷ Ibid, 898.

³⁸ Baumol, "On Entrepreneurship", 11.

³⁹ Baumol, "Entrepreneurship", 894.

⁴⁰ Murphy, Shleifer and Vishny, "The Allocation of Talent."

⁴¹ Acemoglu, "Reward Structure."

⁴² Ibid, 33.

⁴³ Nunn, "Historical Legacies."

⁴⁴ Ibid. Nunn's model, and his accompanying historical discussion, demonstrates that those colonies with a low disease environment became settled and property rights were protected. In such colonies, the high production equilibrium emerged. In contrast, Nunn finds that the low production equilibrium emerges with high disease incidence. Crucially, he shows that the stability of the low production equilibrium persists even after external extraction ends.

⁴⁵ Henrekson and Sanandaji, "The Interaction."

⁴⁶ Ibid.

⁴⁷ Ibid, 53.

⁴⁸ Ibid, 58. Frivolous lawsuits are defined within economics as those with a low chance of prevailing at trial. They are only brought for the prospect of settlement. For a theoretical discussion on the economics of frivolous lawsuits and their connection to entry barriers see Katz, "The Effect of Frivolous Lawsuits on the Settlement of Litigation".

⁴⁹ Aghion et al, *Industrial Policy and Competition*; Crafts, *Creating Competitive Advantage*.

⁵⁰ Aghion et al, *Industrial Policy and Competition*.

⁵¹ Crafts, "British Relative Economic Decline," 27.

⁵² Ibid, 17.

⁵³ Ibid.

⁵⁴ Ibid, 26.

⁵⁵ *Creating Competitive Advantage*, 3.

⁵⁶ Crafts, "The Golden Age."

⁵⁷ Ibid, 21-25.

⁵⁸ Ibid, 24.

⁵⁹ Brownlow, "The Causes and Consequences."

⁶⁰ Ibid.

⁶¹ Portland Trust, *Economics in Peacemaking*.

⁶² Isles and Cuthbert, *Economic Survey*, 186.

⁶³ Brownlow, "The Causes and Consequences", 75.

⁶⁴ Isles and Cuthbert, *Economic Survey*, 364.

⁶⁵ Ibid, 349.

⁶⁶ Ibid, 349.

⁶⁷ Ibid, 350.

⁶⁸ Birnie and Hitchens, *Northern Ireland Economy*, 82.

⁶⁹ For empirical surveys that give some counterfactual perspectives see the discussion in Ibid, 81-95 and Fielding, "Investment, Employment and Political Conflict in Northern Ireland."

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- ⁷⁰ Levin, *John De Lorean*, 174.
- ⁷¹ The index of industrial production, as late as June 1971, stood at a record level. In the first six months of 1971 5,488 new jobs had been negotiated, but only 80 were in August and only 151 in September, Cairncross, *Review of Economic and Social Development*, 8.
- ⁷² *Ibid*, 9.
- ⁷³ Quigley, *Economic and Social Strategy*, 25.
- ⁷⁴ *Ibid*, 36.
- ⁷⁵ Levin, *John De Lorean*, 260; Fallon and Srodes, *De Lorean*, 435-437.
- ⁷⁶ Levin, *John De Lorean*, 260.
- ⁷⁷ Fallon and Srodes, *De Lorean*, 268-82.
- ⁷⁸ *Ibid*, 435.
- ⁷⁹ Levin, *John De Lorean*, 129.
- ⁸⁰ Fallon and Srodes, *De Lorean*, 304.
- ⁸¹ The GPD services episode could form the basis of a paper in its own right. At its simplest, R&D work for the car was supposed to be performed by Lotus Cars Limited, under an agreement with GPD Services Incorporated (GPD) a Swiss-based company. Agreement was for GPD to get US \$17.65 million (or £8.83 million); however, DMCL paid Lotus/GPD an additional \$23 million (£11.5 million) on a 'cost plus' basis for additional work. However, investigation showed that none of the initial sums (US \$17.65 million) ever found its way to Lotus. This fraud as well as the more general losses of public funds led to two decades worth of litigation. The arrest for cocaine possession (which was ultimately thrown out) has likewise been extensively covered elsewhere. For more details see Levin, *John De Lorean*; Fallon and Srodes, *De Lorean*.
- ⁸² At General Motors (GM), he was clearly not interested in conventional business administration, but he had an undoubted ability in marketing. De Lorean did abide by institutional structures at GM but his behaviour there also demonstrated he could alter and evade. At Chevrolet, without the appropriate permission, he gave away dozens of cars to various girlfriends, golf pros and business associates. He was also prone to spend increasing proportion of his time overseeing his private investments while on trips for Pontiac. De Lorean was dismissed from GM after he leaked a highly confidential draft planning paper to *Automotive News*. For more details on his of his separation package, including his 'retirement dinner', see Fallon and Srodes, *De Lorean*, 56-59 and 66-68.
- ⁸³ *Ibid*, 111.
- ⁸⁴ *Ibid*, 112.
- ⁸⁵ *Ibid*, 113.
- ⁸⁶ Levin, *John De Lorean*, 121-22.
- ⁸⁷ *Ibid*, 56-57.
- ⁸⁸ *Ibid*, 232.
- ⁸⁹ The Bricklin SV-1 was a car like the DMC-12 designed for the American market with a similar gull-winged design, and again like DMCL it left the taxpayer (in this case Canadian) worse off.
- ⁹⁰ Levin, *John De Lorean*, 154.
- ⁹¹ Fallon and Srodes, *De Lorean*, 122.
- ⁹² *Ibid*, 123-24.
- ⁹³ "De Lorean 1978-1980", Minute from Department of Commerce sent to 'The Secretary' De Lorean Motor Cars Ltd, April 12, 1979, PRONI CENT/ 1/10/18, PRONI, Belfast.
- ⁹⁴ Levin, *John De Lorean*, 159.
- ⁹⁵ Fallon and Srodes, *De Lorean*, 128.
- ⁹⁶ "De Lorean 1978-1980". Minute by George Quigley entitled 'De Lorean Project', PRONI CENT/ 1/10/18, July 14, 1978, PRONI, Belfast.
- ⁹⁷ *Ibid*. Minute from Department of Commerce sent to 'The Secretary' De Lorean Motor Cars Ltd', April 12 1979, PRONI, Belfast.
- ⁹⁸ *Ibid*. Minute by George Quigley entitled 'De Lorean Project', 4. July 17, 1978, PRONI, Belfast.
- ⁹⁹ *Ibid*. Minute by George Quigley entitled 'De Lorean Project' July 14, 1978, PRONI, Belfast.
- ¹⁰⁰ *Ibid*. Telex to Frank McCann, Department of Commerce July 21, 1978, PRONI, Belfast.
- ¹⁰¹ *Ibid*. 'Minute to Dr George Quigley' July 22, 1978, PRONI, Belfast.
- ¹⁰² *Ibid*. Unsigned document entitled 'De Lorean Project' May 24, 1979, PRONI, Belfast.
- ¹⁰³ *Ibid*.
- ¹⁰⁴ *Ibid*. Minute by George Quigley entitled 'De Lorean Project', 4. July 17 1978, PRONI, Belfast.
- ¹⁰⁵ *Ibid*. Such an assessment was predictable given the commitment made in the Quigley report to picking winners. Quigley praised De Lorean's entrepreneurship and charisma. De Lorean was described in the memo as a 'cult figure...a man of star quality, respected for sheer, solid performance as well as for flair' surrounded by a strong team. A successful project would in Quigley's opinion improve the region's reputation, help it break

away from a 'branch plant syndrome' and provide a 'catalytic effect' for West Belfast's political and economic fortunes.

¹⁰⁶ Ibid, 4-5.

¹⁰⁷ De Lorean, *DeLorean*; Mason, *Paying the Price*, 219.

¹⁰⁸ "De Lorean 1978-1980". Letter from John Freeman to Roy Mason, July 19, 1978, PRONI CENT/ 1/10/18, PRONI, Belfast.

¹⁰⁹ Ibid. Letter from Roy Mason to Joel Barnett, July 11, 1978, PRONI, Belfast.

¹¹⁰ Joel Barnett was Labour's Chief Secretary to the Treasury (1974-79). He is most famous for lending his name to the Barnett formula, the formula that allocates public spending between the four constituent parts (England, Northern Ireland, Scotland and Wales) of the United Kingdom. Strathearn Audio Ltd was a State-owned and operated firm that produced speakers and turntables. It was not a commercial success.

¹¹¹ "De Lorean Motor Co. Northern Ireland Car Assembly Project". Memo entitled 'Northern Ireland: Claim on Contingency Reserve', July 30, 1980, National Archive (henceforth NA) FV/22/125, National Archive, London.

¹¹² PRONI CENT/ 1/10/18. File entitled 'De Lorean 1978-1980'. Memo entitled 'De Lorean-additional funding', June 27, 1980 held at PRONI, Belfast.

¹¹³ Ibid. The official advice was that even if the UK government won the court case, the negative publicity of closure would have been huge on the heels of the failure of Strathearn Audio. Moreover, it was feared that the closure of DMCL would make the restoration of devolution even more difficult.

¹¹⁴ Fallon and Srodes, *De Lorean*, 223. This episode became known as 'the GPD fraud' and was an important part of a series of lawsuits that attempted to recover public funds long after receivership. For more information see NIAO, *De Lorean*.

¹¹⁵ Lotus was not used to designing for any kind of volume and this contrast with the mass production philosophy of the older engineers at Dunmurry led to conflict. Problems also arose from De Lorean's insistence that the car be built from the outside in (i.e. building the car from the stainless steel body shell to the plastic underbody inside and only then creating a chassis) was incomprehensible to the highly experienced Lotus engineers, steeped in conventional motor industry practice (Fallon and Srodes, *De Lorean*, 193-210).

¹¹⁶ There are many of examples of this perhaps the most infamous example of extravagant expenditure was the remodeling of a guesthouse on the factory premises. A reputed £20,000 was spent on gold-plated taps for the bathroom. Levin, *John De Lorean*, 177.

¹¹⁷ "De Lorean 1978-1980". Document entitled 'Heads of Agreement Between the Northern Ireland Department of Commerce, the Northern Ireland Development Agency and the De Lorean Motor Company' PRONI CENT/ 1/10/18, PRONI, Belfast. This agreement was important because failure of DMCL to match its 'employment obligations' was supposed to entitle the Department of Commerce to some or all the funds given to DMCL.

¹¹⁸ Only 123 cars were sold during the first ten days of the month in the United States and production in November ran at approximately twice the level of retail sales. De Lorean could claim correctly that 6,500 cars worth £85 million were shipped from Belfast; only 1655 of these ever reached dealers. Fallon and Srodes, *De Lorean*, 371-78.

¹¹⁹ Ibid, 376.

¹²⁰ "De Lorean Motor Company". Document entitled 'US Investment in Northern Ireland: Draft Guidance for Posts', PRONI DED 21/6/1, undated, PRONI, Belfast.

¹²¹ "De Lorean 1978-1980". Minute of meeting entitled 'The Secretary of States Meeting with Mr John De Lorean and Mr Cafiero-9.15am on 5 August 1980 at Hillsborough Castle', August 6, 1980, PRONI CENT/ 1/10/18. PRONI, Belfast.

¹²² Ibid. Memo entitled 'De Lorean' October 2, 1980. De Lorean hoped an estimated shortfall of £6.3 million would come from the NIDA, but the UK government followed the Treasury's firm line that any shortfall required private sector involvement. McKinsey advice was that the funding gap between the £14 million loan and the actual sum needed was likely to be in the range of between £2 million and £14 million with a 'most likely' level of £9 million. Private correspondence between Humphrey Atkins and Keith Joseph in July 1980 was still more concerned with the negative publicity of closure for future investment rather than the viability of the firm. "De Lorean Motor Co. Northern Ireland Car Assembly Project", Letter from Humphrey Atkins to Keith Joseph, July 25, 1980, NA FV 22/125, NA, London.

¹²³ Ibid. "De Lorean 1978-1980". Minute of meeting entitled 'The Secretary of States Meeting with Mr John De Lorean and Mr Cafiero-9.15am on 5 August 1980 at Hillsborough Castle', August 6, 1980, PRONI, Belfast.

¹²⁴ Ibid. Memo entitled 'De Lorean' October 2, 1980.

¹²⁵ Ibid.

¹²⁶ The Transbus was a project that De Lorean tried to develop initially with the public funding provided for the DMC-12, but this was clearly in violation of the subsidy agreement. NIDA forbade DMCL investing time and effort in any project not related to the car. Despite attempting to get American public funding support for constructing the bus in a deprived part of Miami, the Transbus project never came to fruition. One account suggests the possibility that it was ‘some sort of scam to lure car investors’. It is alleged that potential investors in the Transbus project would be asked at meetings to fund the Northern Irish car factory. Levin, *John De Lorean*, 190.

¹²⁷ Fallon and Srodes, *De Lorean*, 385.

¹²⁸ NIAO, *De Lorean*, 7.

¹²⁹ *Ibid.*

¹³⁰ Fallon and Srodes, *De Lorean*, 376.

¹³¹ *Ibid.*, 367.

¹³² Boettke, Coyne and Leeson, “Institutional Stickiness and the New Development Economics.”

¹³³ Rodrik, “Second Best.”

¹³⁴ For more detail on the differences between best first-best and second-best approaches see Rodrik’s discussion in *Ibid.*

¹³⁵ Boettke, Coyne and Leeson, “Institutional Stickiness.”

¹³⁶ *Ibid.*

¹³⁷ Robinson, “Industrial Policy and Development: A Political Economy Perspective.”

¹³⁸ Such authors argue that interventions shifted its exports away from comparative advantage and towards a model that stimulated productivity growth. Wade, *Governing the Market*.

¹³⁹ For alternatives to Wade and the developmental state line of argument see Rodrik, “Understanding Policy Reform” and Rodrik, Grossman and Norman., “Getting Interventions Right”. Crafts, “East Asian Growth.”

¹⁴⁰ Crafts, “East Asian Growth Before and After the Asian Crisis.”

¹⁴¹ Moretti, *The New Geography*.

¹⁴² Fridenson, “Business Failure”, 582.

¹⁴³ Henrekson and Sanandaji, “The Interaction”, 62.

¹⁴⁴ Fridenson, “Business Failure.”

¹⁴⁵ Crafts, *Economic History Matters*.

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