The resilience of institutions: Uruguay, Iceland -a comparison

Örn D. Jónsson (University of Iceland)¹

Abstract

The study is a comparison of the socioeconomic development of Iceland and Uruguay. Three frames of analysis are utilised; intuitional analysis; traditional economic approach and finally the emphasis is on learning processes and empowerment. The research is confined to the development before the 2008 focusing on institutional resilience and the importance of geopolitical settings; in the Cold War era, Iceland was located in the 'frontier', backed up by the United States while Uruguay located in the 'backyard'.

Keywords: Geopolitics, institutions, empowerment.

Introduction

At first sight it seems far-fetched to compare the evolutionary aspects of the economic development of Uruguay and Iceland; topographically remote, with a radically different history and seemingly an overall different cultural setting. Iceland, before the global crisis belonged to one of the most prosperous nation-states worldwide, while Uruguay, again was plagued by deep-rooted economic crises in the post war era. At a closer look, the comparison is not so out of place. Early on, Uruguay was one of the most affluent societies on the globe; a welfare state reminiscent of the so called 'Nordic model', emerging several decades later in Scandinavia. Iceland, exceptionally poor by European standards initialized the prerequisites critical for modernity early in the twentieth century, inspired

¹The author acknowledges the contribution of Judith Sutz, Professor of Science, Technology and Society at the Universidad de le República, Uruguay and her inspiring and enjoyable discussions.

by the development in its neighbouring countries, primarily England and Scandinavia.

Obviously, there are differences of which the location is the most perceptible one; Uruguay locked in-between two powerful nation-states, Iceland being an island in the North Atlantic, increasingly close knitted to its neighbouring countries.

Due to the economic, political, social, as well as the technological evolution in recent decades, lowering of transaction costs has fundamentally altered the situation of small open economies in an increasingly globally connected world. This applies to regulations, communication and overall technological advancement, financial flows and the growth of human capital (although, presently higher fuel costs might alter the situation). The key to affluence is openness or rather it's opposite. Protectionism distorts development to such an extent that a situation of weakened competiveness is inevitable; the growth of competitive social flows is the key to success (Amin & Thrift 1992; Amin 2006). At the same time, the vulnerability or the volatile situation of small or micro-sized economies increases considerably. In the case of Iceland, it is becoming ever more apparent that the economy has by far outgrown the boundaries of the nation-state. The existing social technologies and political governance have been rendered more or less economically inefficient. In the case of Uruguay, the interdependence created by MERCOSUR, the trade alliance between, Argentina, Brazil, Paraguay and Uruguay, intensified the vulnerability described, metaphorically as a flu/influenza relationship; when a neighbour experiences economic turmoil, Uruguay suffered a serious crisis.

Increased global relations are seen as a prerequisite for affluence but the sheer vulnerability generated by the small size and typically hegemonic sectoral composition of the economic systems studied, can have graver consequences quite different from what the bigger and more complex economies come across. Yet, small size allows flexibility and, definitely creates opportunities. Therein lies the paradox of the situation of small open economies. Openness is a prerequisite for prosperity, but stronger and more complex ties renders local governance inefficient on the verge of being obsolete or precarious.

The catching up process – three streams of analysis

Here we will attempt to shed a light on the peculiar phase of convergence/divergence characterizing the development of the post war era. Allowing a certain degree of anachronism of the historical dynamics of Uruguay and Iceland, it could be stated that the 'Nordic Model' was implemented in Uruguay i.e. mixed equalitarian welfare society on a relatively high income level, before the necessary material prerequisites existed in Scandinavia let alone Iceland (Esping-Andersen 1999; Landes 1998). The above statement brings us to focus on the institutional settings or its recent broader definition as 'social institutions' or their more operative version as 'social technologies' (Nelson 2007; Eggertsson 2005).

For the most part the study is restricted to the post WWII period and the North/South discourse becomes a fundament of our analysis. The so called 'catch up' discussion (Abramovitz, 1986; Fagerberg & Srholec, 2006; Arecona &Sutz, 1999).

Fagerberg and Srholec (2006) present a helpful frame for the discussion of the 'catching up process' by distinguishing between three main frames of reference:

- The 'Institutionalist' view, focusing on how to get the functioning framework for efficient markets structures, transactions and the role of private ownership.
- The role of productivity capital relation between growth and development.
- The 'knowledge based' approach, according to which catching up (or lack of such) depends not so much on capital as the abilities of a country to create and exploit knowledge; the "social capability" or more precisely; in which the "absorptive capacity" plays a central role.

The Institutionalist view

The rapidly growing literature of New Institutional Economics (NIS) has repeatedly been criticized for being an unduly passive historical analysis rather than a policy oriented approach. Eggertsson's concretization of North's concept of 'social institutions' as 'social technologies'; a "...process whereby social institutions produce particular outcomes" paves a way for NIE based policy discussions (Eggertsson 2005 p. 3). Later, Nelson

using a Schumpeterian and a more passive approach, broadens the institutional framework as; "conception of what institutions are – basically the factors and forces that mould and hold in place social technologies" (Nelson 2007 p. 3).

The different sectoral characteristics of the two nation's economies were further enhanced by the apparent post war divergence being not only of quantitative accumulation but rather an overall structural nature. In the fifties the innovations and technological advances in agriculture in the more affluent countries meant that the overall prices of foodstuffs fell worldwide. The agriculturally based economy of Uruguay devolved into an insufficient fundament for the rising expectations in the more technologically advanced societies worldwide which led to an identity crisis as well as a material one (Blyth 2002). In addition, a complex chain of events resulted in serious political turbulence (Panizza2004).

The guarded national system, a long-standing principal rationality, was to protect small business (i.e. farming) against the threats of the large-scale productivity of industrial modernization. The system was, in a sense, based on 'dictatorship over needs' or paternalistic governance disrupted by WWII (Feher, Heller & Markus 1983). Productivity in fisheries in contrast to farming led to higher prices as fish was the last animal in sizable quantity domesticated. Technological advance, therefore led overexploitation at a time changing lifestyle demanded leaner food (Jónsson 1998). The belief that the latecomer societies were in an advantageous situation as they could learn from the front runners was taken for granted in Iceland as well as Uruguay (Gerschenkron 1962), a firm belief adhered to by dominant interest groups in both countries. However, the strong adherence to the basic resources had opposite impact on the two countries; innovation and consequent productivity resulted in reduced overall wealth in Uruguay while in Iceland the income from fisheries became a steppingstone to further affluence.

According to the indicators of the widely accepted HDI index for the year 2005, Iceland had the top score while Uruguay sits at number 46. At a closer look the divide is not so drastic, as Uruguay is at number 6 of the Americas and third in Latin America. Most of the demographic indicators are alike; democracy, literacy, health care (same number of physicians per capita), infrastructural utilities (100% access to clean water), to name a few. Apart from the obvious difference in GDP per capita (10,000 \$ versus 36, 000 \$ in 2005) are is related to education, technology and research. The

conclusion from a structural viewpoint therefore seems to be that potential possibilities for a functioning demographic welfare state existed in both countries while only Iceland could transform the demographics possibilities into a flourishing social development. Influx of capital followed, privatization of the rich fishing grounds and, later the privatization of the cumulated embedded wealth of the population resulted in explosive growth. Growth was magnified by intuitional and technological reduction of transaction costs along with abundant access to investment capital worldwide.

The increased openness magnified Iceland's possibilities while the formation of MERCOSUR has, in a sense, intensified Uruguay's dependency on its neighbors.

The Economic approach

Comparing the development of the two countries from an economic point of view, the short answer would be that Uruguay had a "head start" when it came to growth up until WWII then slowly falling behind or becoming a "laggard" in the mid sixties. Iceland in contrast, a colony and a late-developer, leaped into modernity in the advent of the War experiencing an exceptionally rapid growth in the post-war era. The comparison of the structural characteristics of the two nation-states and offers a rather unusual variant of the North/South tendency of divergence but follows the overall path of resource dependence all the same. Iceland freed from its resource dependency or the fisheries while Uruguay is heavily dependent on its favorable agricultural base, a typical example of the 'dutch disease' (Sala-i-Martin, 2002; Gylfason 2000).

The likelihood of rapid economic growth in Iceland as well as in Uruguay must have been implausible up until the mid twentieth century but for opposing reasons. Uruguay was 'locked in' due to its agriculturally based prosperity that had served so well; a relatively equalitarian state sometimes termed "Switzerland of the South". The Icelandic economic system was, due to a political stronghold, similarly based on agriculture up until the WWII despite the sectors unmistakable inadequacy (Jónsson 2004).

Uruguay's economy was characterized by an export-oriented agricultural sector, a well-educated work force, and a high level of social spending. After average growth of 5% annually during 1996-98 the economy suffered a major downturn in 1999-2002, stemming largely from the spillover effects of the economic problems of its large neighbours, Argentina and

Brazil. Argentina, for instance, made massive withdrawals of dollars deposited in Uruguayan banks in 2001-02, which led to a plunge in the Uruguayan peso and a massive rise in unemployment. Total GDP in these four years dropped by nearly 20%, with 2002 being the worst year due to the banking crisis. The unemployment rate rose to nearly 20% in 2002, inflation surged, and the burden of external debt doubled. Cooperation with the IMF helped stem the damage. Uruguay improved its debt profile in 2007 by paying off \$1.1 billion in IMF debt, and continued to follow the orthodox economic plan set by the Fund in 2005. The construction of a pulp mill in Fray Bentos, which represented the largest foreign direct investment in Uruguay's history, in November 2007, is expected to add 1.6% to GDP and boost already rising exports. The economy had grown strongly since 2004 as a result of high commodity prices for Uruguayan exports, a strong peso, growth in the region, and low international interest rates.

In Iceland, the outside shock of WWII radically redefined the technical and financial conditions permitting an unparalleled period of growth or a "from rags to riches tale"; fishery dependent economy turning into a fully-fledged multi-sectoral and globalized economy (Jónsson, 2004).

At the outset the primary task was creating a solid economic base that was done by utilizing the generous Marshall aid, which was the proportionally highest per capita in Europe although the actual War damages suffered were negligent. Similarly, only a part of the income from fish sold to the allies were paid during the war while the rest was reimbursed afterwards in a lump sum and primarily invested in trawlers politically distributed around the country. This influx allocated sectorally was sufficient to establish the economic fundaments of the nations economy; a fertilizer plant, a cement production unit, along with fish meal factories. The investments were either constructed for grants or soft loans. It goes without saying that these contributions reflected the backward state of the economy. The focus was on the rudimentary requirements or infrastructure-like production facilities. In short, the basics of a modernized economy were supplied on a silver plate due to the politically strategic location of the country from a Cold War worldview. In the early sixties, at technical improvement in the fisheries' techniques of herring, made it possible to sharply reap the large migrating herring shoals. This was followed by the construction of an aluminum smelter and ferro- cilicium plant in the mid sixties.

By extending the fisheries limits from 12 miles (1958) to 50 miles in 1972 and, eventually to 200 miles two years later the lever of riches came

fully into play. The decaying trawler fleet was modernized in less than three years between 1971 to 1973, reaping in full the benefits of the redefined ownership over the fishery grounds surrounding the island. Exclusion of foreign fishing generated affluence, reminiscent of the early post war years.

In Uruguay, as in most other central and Latin American Countries, the focus was on the ruling elites and securing their position, (a similar strategy the Soviet Union used in practice although camouflaged by a different ideological rhetoric). The overall economic impact of the Cold War divide plays definitely an important role in the economic aspect of the divergence between the two countries. The otherwise fertile ground of a relatively equalitarian society in Uruguay was hindered from transforming itself to a modern competitive economy due to the all encompassing political Cold War disputes.

The Knowledge Based Approach of the learning society

In adapting the 'knowledge based approach' the comparison brings to the surface a curious difference. The Icelandic economy had become integrated into the global economy at astonishing pace while the Uruguayan economy has suffered several blows in the last decades. The reasons behind the disparity are complex but one of its manifestation is crucial: Uruguay expreienced a massive 'brain drain' or emigration estimated as numerous as 15% of the population in less than two decades. Here, as in other 'rest' countries to cite Amsden (2007), the most capable fractions of the population, are the ones that could fulfill the innovation potentials that had been emerging in several areas around the globe. Seen from a somewhat cynical viewpoint, intellectual capital became the nations primary export (Pellegrino2004). The lack of higher education facilities in Iceland forced the young to seek their education abroad and was aided to do so by an unusually favorable student loan system. High percentage of the students returned and brought with them a set of prospective networks creating 'meaningful nodes' close to home as well as globally, thereby establishing the necessary, if not sufficient prerequisites for the path towards the 'learning economy'. A noteworthy example of 'brain circulation' similar to Taiwan and Finland although the causes may have been different (Saxenian 2005). This circulation process remained from the sixties up until the nineties or until further education strengthenednationally (Hannibalsson 2005). An elementary comparison of the complex relationship of the two societies through the lense of a

'learning economy' indicates that the divergence in economic wealth does not necessarily result in weaker democratic institions rather the fundaments or the structures adhered to knowledge or, more narrowly prhased as information (See Table 1.).

Table 1. Aspects for comparing Iceland and Uruguay

	Iceland	Uruguay
Metaphysical bias (1)	Great importance attributed to education. Early achievement of universal alphabetisation. High social value attributed to practical knowledge, including extensive farming practice for children. High enrolment and outward oriented higher education. Part of the Scandinavian welfare space. "Easy entrepreneurship".	Great importance attributed to education. Early achievement of universal alphabetisation. Lasting influence of a socially sharp division between manual and intellectual work. Low enrolment in higher education. Early and fairly unique welfare state in Latin America severely eroded since the 1960's. "Difficult entrepreneurship".
Metaphysical bias (2)	Down-to-earth pragmatism or level- headedness seen as a much more important 'sticky knowledge' than the influx of formal knowledge and high technology endeavours.	The "capacity to innovate in scarcity conditions" is a main productive and innovation asset, both for import substitution and for linking innovative efforts to welfare efforts.
National scientific interests	Widely distributed disciplinary knowledge base, in academia and in production. High points in verity of life science, ITCs and engineering.	Fairly distributed disciplinary knowledge in academia. High points in the whole spectrum of the life sciences. Narrow spectrum of disciplinary knowledge in industry.
Institutional structure	Growth of R&D spending and of industrial R&D. Well behaved financial sector in relation to innovation. Progressive (actually high) absorption of highly skilled personnel in industry.	Stagnating national and industrial R&D spending over decades. Unsuited financial sector in relation to innovation. Persistent low absorption of highly skilled personnel in industry.

To summarize; Uruguay, with an excellent head start; a pastoral Eldorado populated by skilled immigrants from Europe gradually lost momentum after the WWII. Iceland was converted to modernity in a

surprisingly short time period from being one of the most poverty-stricken societies in Europe to become affluent. In both cases, the formal as well as social institutions were present.

The new innovation system in Iceland favored young entrepreneurs rooted in sectorally based knowledge; utilizing global meaningful nodes that had evolved tacitly in the last decades. Such was the case in aviation; generic drugs production, retail, manufacturing of food production equipment, and information technology some of which count among the leaders worldwide. All of these are traditional sectors based on a fairly solid and accessible technology base managed by a new generation of risk seeking 'born globals'.

Concluding remarks

Uruguay was one of the most affluent societies in the mid eighteenth century populated by skilled immigrants from Europe. The population was homogenous and equalitarian by Latin American standards, reaping the benefits of its fertile soil. The nation became one of the first welfare states worldwide, a free general education, a solid national health system and an overall democratic fundament. A backward looking utopia as Uruguayans describe their social development. Iceland, a society economically barely above the subsistence level for the most part of the thousand years of settlement. Yet, despite the utter poverty, the population preserved its oral heritage, equalitarian work ethic and democratic intuitions.

The formally sound institutional fundaments of a hard working population characterizing both countries evolved in an unusually divergent manner in the advent of the Second World War. Uruguay located in the 'backyard' in the Cold War era. Iceland statically located in the frontier, backed up economically as well as socially in a significant manner. Both countries were heavily resource dependent, one relying on agriculture, the other on fisheries. The inherent differences contributed significantly to the divergence. The worldwide innovative productivity lowered the prices of agricultural goods while technological advances increased the value of fish. This led to overexploitation of fish, a situation of scarcity even intensified by prefence for lean protein rich food stuffs. The important alliances; NATO, EFTA, and an unusually favorable agreement with EU minimized the crisis in 2008. The MERCOSUR alliance had a significant economic impact due to various reasons while the lowering transaction costs

combined with wide reaching privatisation led to an explosive growth and downturn in Iceland.

Uruguay experienced a serious case of brain drain due to political turbulence, economic stagnation, and the lock-in situation between two economically unstable giants. Iceland, with a strong encouragement of students seeking higher education abroad experienced an unparalleled case of brain recycling. The revolution in information technology, reduction of tariffs and transportation costs along with unrestricted capital flows has triggered off a decade of explosive growth in Iceland creating exceptional economic openness and an enlarged economy of a microstate incapable of providing a sufficient instituinal framework to external influences.

Despite the vulnerability of open microstates both countries seem to have the fundaments, which will be sufficient to enable them to face an unpredictable future although such statements should be taken with precaution

References

Abramovitz, M. (1986): Catching Up, Forging Ahead, and Falling Behind. *The Journal of Economic History*, 46(2), 385-406

Amin, A. & Thrift, N.(1992): Neo-Marshallian nodes in global networks. *International Journal of Urban and Regional Research*, 16(4), 571-587

Amin, A. (2006). Comparing Regional Development Policies in Brazil and the European Union. Paper for Presentation at the International Seminar Brasilia, 23. March 2006.

Amsden, A. H. (2007): Escape from Empire: The Developing World's Journey through Heaven and Hell. Boston:MIT Press

Arocena, R. & Sutz, J. (1999): Looking at national innovation systems from the south. *Industry and Innovation, Vol. 7* (June 2000), pp. 55–75.

Blyth, M. (2002): *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge: Cambridge University Press.

Eggertsson, T. (2005):Imperfect Institutions: Possibilities and Limits of Reform.University of Michigan Press.

Esping-Andersen, G. E. (1999) *The Social Foundations of the Welfare State.* Oxford: Oxford University Press.

Fagerberg, J.&Srholec, M. (2006): Catching Up: What are the critical factors for success? Paper presented at the SPRU 40th Anniversary Conference

on "The Future of Science, Technology and Innovation Policy", University of Sussex, September 2006.

Feher, F., Heller, A., & Markus, G. (1983). *Dictatorship Over Needs*. Basil: Blackwell.

Gerschenkron, A. (1962): Economic backwardness in historical perspective. Cambridge, MA: Harvard University Press.

Development, september.

Gylfason P. (2000): "Natural Resources and Economic Growth: A Nordic Perspective on the Dutch Disease,"í Richard M. Auty (ritstj.), Resource Abundance and Economic Development, Oxford University Press.

Hannibalsson, I. (2005): Managing universities with respect to quality. In I. Hannibalsson (editor), Rannsóknir í félagsvísindum VI (pp. 325-336). Reykjavik: Félagsvísindastofnun Háskóla Íslands.

Jónson, G. (2004): The Transformation of the Icelandic Economy: Industrialisation and Economic Growth, 1870–1950. In S. Heikkinen and J. L. Van Zanden (editors), Exploring Economic Growth. Essays in Measuremnet and Analysis. A Festschritft for Riitta Hjerppe on the 60th Birthday (pp. 131–166): Amsterdam: Aksant.

Jónsson, Ö. D. (1995): Learning to Globalise. The Case of the Icelandic Fishing Industry'. í Peter Maskell: Heikki Eskelinen; Ingjaldur Hannibalsson; Anders Malmberg og Erik Vatne (ritstj.) Competitiveness, localised learning and regional development. Specialisation and prosperity in small open economies. Routledge, London, 1998.

Jónsson, Ö. D. (1995): Regional Aspects of Icelandic Innovation System.PhD. Thesis. Roskilde: Roskilde University press.

Landes, D. S. (1998): The Wealth and Poverty of Nations: Why Are Some So Rich and Others So Poor. New York: Norton & Company

Nelson, R. (2007): "Social Technologies" and Economic Progress. *GlobelicsWorking Paper Series*, No. 2007-03.

Panizza, F. (2004): A Reform Without Losers, The Symbolic Economy of Civil Service Reform in Uruguay, 1995–96. *Latin American Politics and Society*, 43(3), 1 – 28.

Pellegrino, A. (2004): Migration from Latin America to Europe: Trends and Policy Challenges. Geneva: International Organization for Migration.

Sala-i-Martin, X. (2002): 15 Years of New Growth Economics: What Have We Learnt? *Journal Economía Chilena (The Chilean Economy)*, Central Bank of Chile, 5(2), 5-15.

Saxenian, A. (2005): From Brain Drain to Brain Circulation: Transnational Communities and Regional Upgrading in India and China. *Studies in Comparative International Development*, 40(2), 1132-1181.

Received: January 21, 2016 Accepted: May 3, 2016