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Analysis on Phases of Globalization and Convergence

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Abstract: Globalization, along with many conceptual notions, such as economic growth, convergence has involved a mass of research works, but remains disputable based on miscellaneous samples and periods. This paper aims to discuss to what extent two phases of globalization are similar in the light of convergence and variants. With methods of historical analysis and empirical evidence synthesis, we find the first and second phases of globalization have common features on remarkable economic growth, transport costs' decline and free and flexible trade policy, but the range and extent are moderately different. Additionally, the two phases of globalization have various convergence paths. Some new perspectives such as social and political dimensions and policy implications have been referred to.

Keywords: Globalization, Convergence, Factors

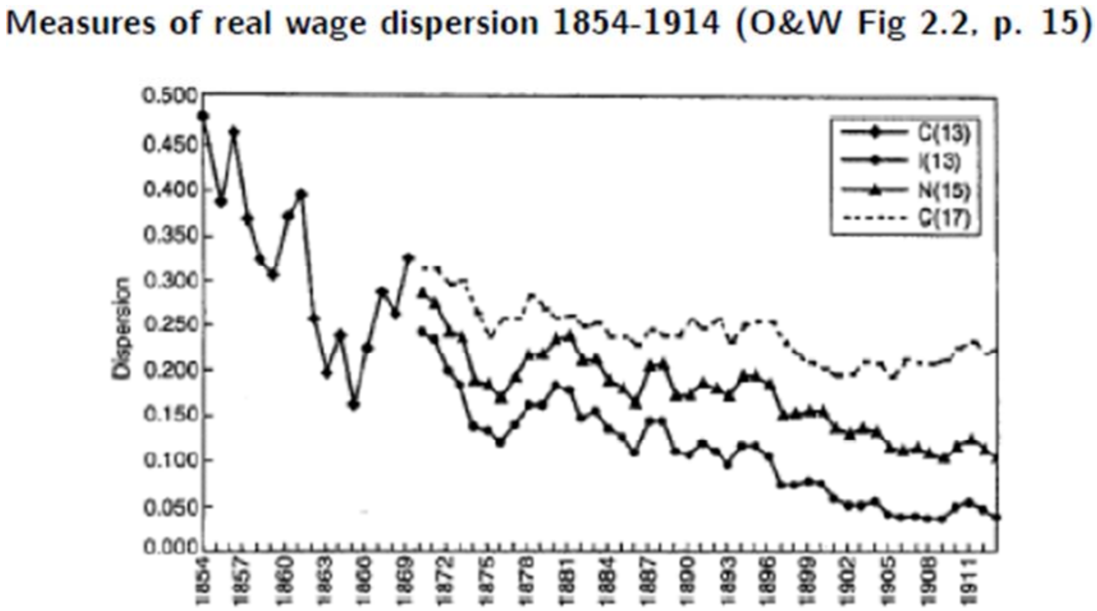
1. Introduction

Globalization, from the economic perspective, known as "a movement towards neoliberal economic policy reforms and an increase in the worldwide movement of capital, goods, services and labour" [1], can be tracked back in the 19th century. The first phase of globalization (G1) was defined from 1850 to 1914, due to the interwar period of 1914-1945, after which there is the second phase of globalization (G2) dating from 1950 till now [2]. Convergence, originally detected among "Atlantic economies" (also called OECD countries), indicating that economies with varied levels and situations can move towards a point from different directions and meet or reach the same level, is bound up with the evolution of globalization [3, 4]. Specifically, the New World, known as U.S. and European countries converged on the issue of trade expansion, commodity prices, real wages, etc. during the rounds of globalization and globalization has been considered as "the leading to the erosion and lessening of national differences" [5]. The extent and corresponding periods, nevertheless, vary from patterns or economies [6]. Each stage is seen as a prerequisite for the next stage, as new political, economic and social institutions should enable more advanced and differentiated activities in the future [7].

The overall structure has been outlined as follows: some primary reasons for convergence will be presented in section 2; compared with the first phase of globalization, section 3 focuses on the similarity and difference of the second epoch; finally, policy implication and conclusion regarding globalization with convergence would be deduced reasonably and soundly.

2. Principal Factors of Convergence in the First Phase of Globalization

According to O'Rourke and Williamson (2001), "G1 involved the most extensive real wage and living standard convergence OECDs have witnessed" [8]. The average wage gap between the New World and Europe takes up 60% of the real wage variance and 40% scattering in Europe (Figure 1). 60% of the real wage convergence can be accounted for the narrowing and elimination of wage gap. Several principal factors of convergence will be examined.

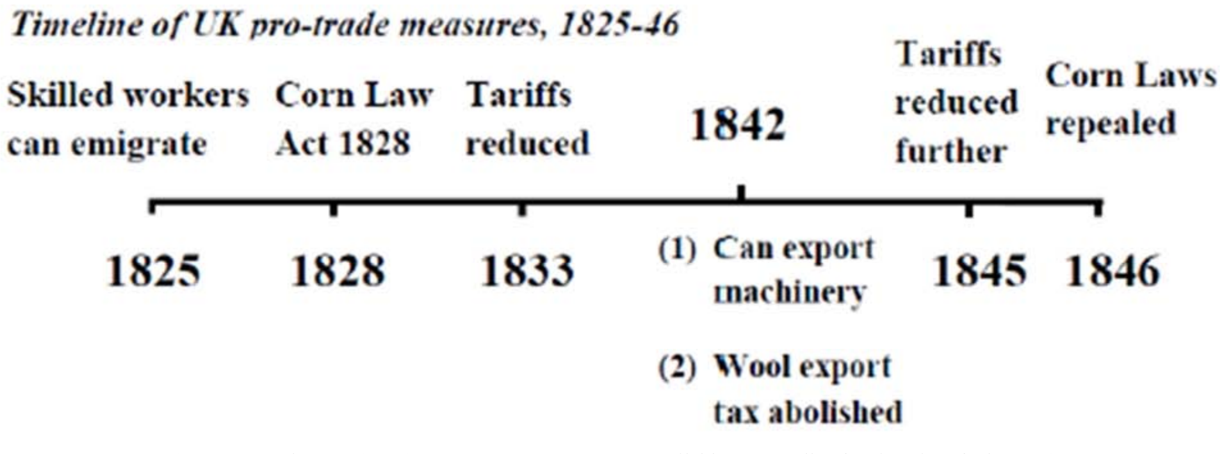


(Source: O'Rourke, K. H. and J. G. Williamson. (2001). Globalization and history: the evolution of a nineteenth-century Atlantic economy, MIT press.)

Figure 1. *Measure of real wage dispersion.*

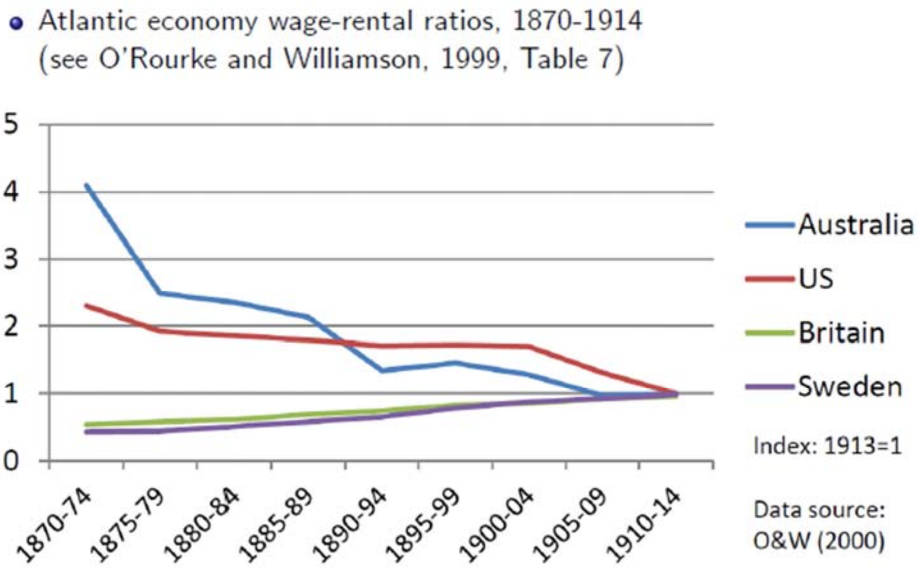
Many research results have identified the decrease of transport costs derived from technological progress as the main cause of convergence [8-11]. Based on Slow Model Theory, one economy's success can be largely resulted from the contribution of Total Factor Productivity. UK and other European countries took advantage of production efficiency and relatively advanced technology to reduce the money and time of transporting goods across borders, such as the techniques of steamship, railway expansion, and refrigeration. It is estimated that transport costs fell by 1.5% per year from 1870 to 1913 and 45% totally [8]. In addition, confronted with fierce competition from South American and Australian, European economies raised their import demands of scanty foodstuffs. These stimulate them to circulate commodity between the New World and Europe, alleviating the gap and promoting the consistence.

Apart from transport costs decline, O'Rourke and Williamson (2001), Williamson (2001) highlight the impact of liberal trade policy and loose legislation concerning trades unions [8, 10]. For example, after 1815, the UK and European countries began to dismantle some of trade barriers for the sake of funding initial losses (Figure 2). However, progress exhibited greater in small countries (Netherland, Denmark and Sweden) than most of Europe until the effects of Cobden-Chevalier Treaty between France and the UK in 1860 (Figure 3) and the Most-Favoured Nation Clause by which countries might extend trade concessions granted to third parties. Despite rise in tariffs, the overall effect of the free trade policy change tended to guide commodity prices to converge.



(Source: Hatcher, M. (2013). IMEP Lecture Notes 1-2. Available on Moodle of University of Glasgow.)

Figure 2. *Timeline of UK pro-trade measures.*



(Source: Hatcher, M. (2013). IMEP Lecture Notes 3-4. Available on Moodle of University of Glasgow.)

Figure 3. *Atlantic economy wage-rental ratios.*

More interestingly, factors also have negative influence on convergence. Transport costs decline gave rise to the increase of tariffs, which implies a distributional effect and protectionism. Free trade may bring about risks of being dependent on imports and threats and suppress on domestic emerging industries. Overall, research has revealed that decline on transport costs attached more significance to market integration and prices convergence than trade policy; however, both of them play a crucial role in the G1 convergence since the synthetic effect is in line with the Hechsher-Ohlin model shown in Figure 4 [2]:

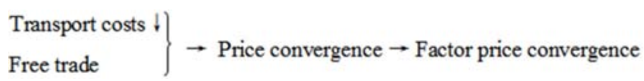


Figure 4. *G1 convergence.*

Applying H-O model to G1, the New World and Europe can be winners and losers in the light of their relatively comparative advantage as shown in Table 1.

Table 1. *Winners& Losers.*

Winners	Losers
New World land	European land
European labour	New World labour

The empirical study on Atlantic economy wage-rental ratios from 1870 to 1914 (Figure 3) reconfirmed real wage and price convergence, relative factor price convergence is consistent with H-O model.

3. Discussion of Convergence in the Second Phase of Globalization

After the Great Reversal, the world has experienced another unpredictable integration and globalization since 1950. The G2 is more bewildering than G1 regarding the amount and sources of convergence.

3.1. Basic Comparison of G1 and G2

G1 and G2 are periods of trade expansion, substantial capital flows and massive migration. They have apparent features on remarkable economic growth, transport costs' decline and free and flexible trade policy, but the range and extent are moderately different. The following (Table 2) on the basis of research from Wolf (2001) and O'Rourke and Williamson (2001) [8, 9], demonstrates the variations between the two periods on convergence.

Table 2. *Features of G1 & G2.*

Features/ Phases	G1	G2
Characteristic of convergence	Concentrated convergence; Shaking changes	Prosaically but internationally economic integration
Transport costs' decline	More dramatically	Modest reduction
Trade policy	More important than transport costs	Play a bigger role than G1; Close relationship; intra-industry trade in manufactures
Capital flows	Short-term: limited capital mobility and a few markets Long-term: Bound up with fixed exchange rate regime; intangible investment;	Short-term: more capital mobility and extensive markets Long-term: Debt financing; more tangible assets;

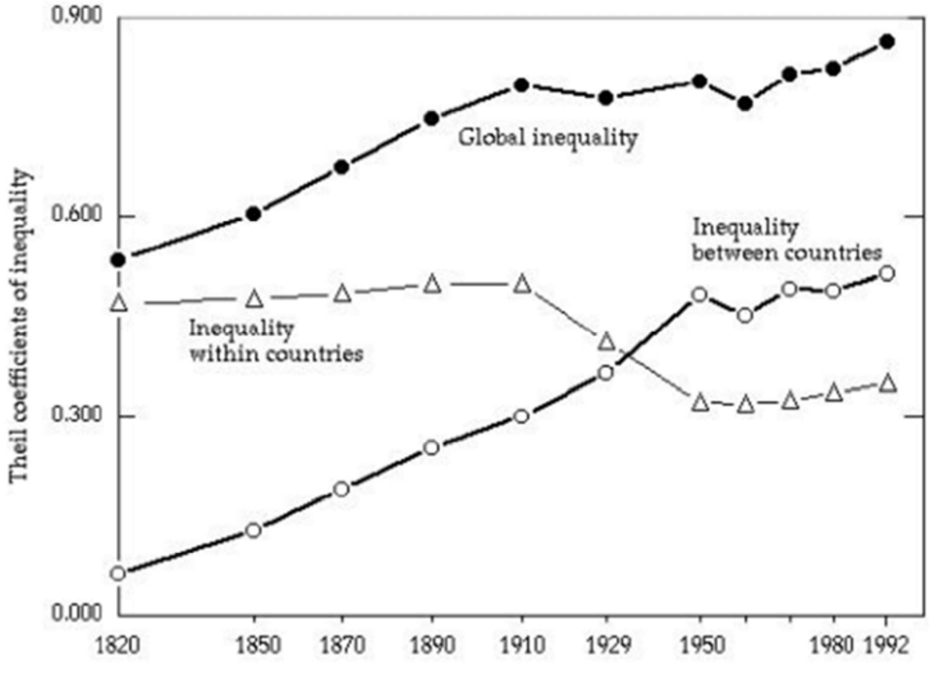
Features/ Phases	G1	G2
	mainly bonds; portfolio flows took dominant role; industrial free-standing companies	bonds and stocks; more direct investment; Multinational corporations
migration	massive	Obvious, but not remarkable
changes	Break trade barriers; Trade specialization	Rise of global institutions; Rise of welfare state

3.2. The Sources of Convergence and Diversity

Compared with convergence in G1, G2 has witnessed relatively moderate convergence and has exhibited convergence in various aspects, not only being confined in real wages and commodity prices, but embodying a range of domains.

3.2.1. Globalization and Inequality, Economic Growth and Migration

Lindert and Williamson (2001) [12] have observed the relationship between globalization and inequality from different epochs (Figure5; Figure6). They found in G2, generically income gaps across participating countries have been lessened, and inequality within economies decreased, but disparity between certain countries went up more rapidly according to the division of labour intensity. The overall tendency is that inequality is meant to be narrowed with economic integration and segmentation, but it is argued that cross-country disparities will stay relatively high especially from social and political globalization perspectives [13]. With the deepening of globalization, the opinion that free trade and openness contributes to economic growth positively or “participation brings prosperity” has been acknowledged [14]; nonetheless, the reason why disparity between countries may become progressively larger lies in that the impacts of globalization exert distinctively on countries. For instance, Ding and Knight [15] [16] focus on the economic growth of China, compared with OECDs or other developing countries which have the same starting point, revealing that China benefits from the advantages of human capital, population growth, and physical investment along with the integration of world, only to achieve the growth miracle of 9.5% in average annual growth rate of GDP. The absolute level of migration in G2 assembles the case in G1, but convergence of G1 took much advantage of relative importance of migration in contrast with G2.



(Source: Hatcher, M.(2013). IMEP Lecture Notes 3-4. Available on Moodle of University of Glasgow.)

Figure 5. *The efficiency of inequality.*

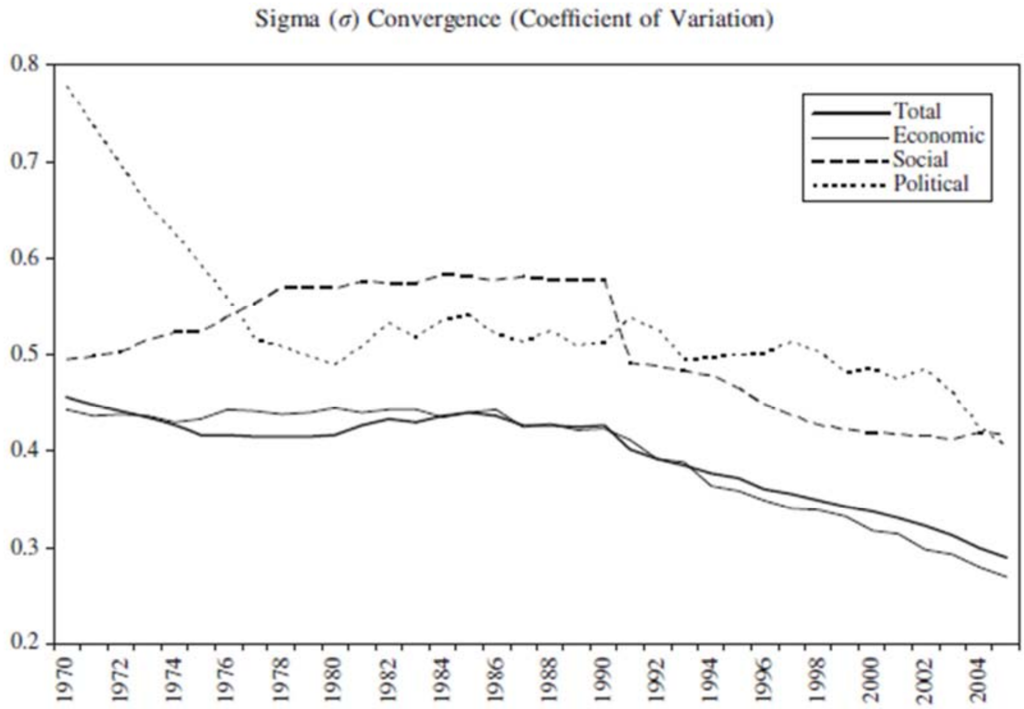
Epoch	Global inequality trend	Inequality between nations: Trend	Inequality between nations: Effects of globalization	Inequality within nations: Trend	Inequality within nations: Effects of globalization
1500-1820	Rising inequality	Rising inequality	No clear net effect.	Rising inequality (W. Europe)	No clear net effect.
1820 - 1914	Rising inequality	Rising inequality	Participants gain on non-partic. countries. Among participants, migration reduced ineq. more than capital flows raised it. Freer trade may have reduced ineq., with exceptions.	No clear trend	Globalization raised inequality in the New World, reduced it in participating Old World nations.
1914 - 1950	No clear inequality trend	Rising inequality	Retreat from globalization widened the gaps between nations.	Falling inequality (in OECD)	No clear net effect.
1950 - 2000	Slightly rising inequality	Slightly rising inequality	Globalized trade and migration narrowed the gaps among participants. Non-participants fell further behind.	Slightly rising inequality (in OECD)	Globalization raised inequality within OECD countries. In other countries, non-participating regions fell behind.

(Source: Hatcher, M.(2013). IMEP Lecture Notes 3-4. Available on Moodle of University of Glasgow.)

Figure 6. *Global inequality.*

3.2.2. Globalization on Other Relevant and Diverse Aspects

Studies are not restricted on OECDs, for example, Martin and Sunley (1998) [17] identified the slow and discontinuous convergence in regional development with exogenous growth model including the observations of developing countries. Villaverde and Maza (2011) [18] conducted regression with conventional σ, β convergence incorporating 114 economies consisting of OECDs and developing countries from the period of 1970 to 2005 (Figure 7) indicting G2 has promoted growth and fostered income convergence all over the countries involved in globalization.



Beta (β) Convergence

	Total		*Economic*		*Social*		*Political*	
	Value	*t-statistic*	*Value*	*t-statistic*	*Value*	*t-statistic*	*Value*	*t-statistic*
	*−0.081**	*−11.90*	*−0.068**	*−9.91*	*−0.064**	*−10.71*	*−0.113**	*−23.03*
Adjusted R^2	0.37		0.30		0.42		0.55	
Number of countries	101		101		101		101	
Number of observations	707		707		707		707	
Speed of convergence (5-years %)	12.02		9.16		8.55		22.25	
Half-life (5-years periods)	8.2		9.9		10.4		5.8	

Note:
*Significant at 1% level.
Sources: KOF index of globalisation.

(Source: Villaverde, J. and Maza, A. (2011). Globalisation, Growth and Convergence. The World Economy.)

Figure 7. *Sigma and Beta convergence.*

Though G2 has increased the scale and size of transactional capital flows, Drezner (2001) [19] finds little convergence on regulatory standards except for policy convergence significantly displaying on labour and environmental standards. However, Blank and Burau (2006) [20] testified that "with a co-existence of convergence and divergence, there are clusters of convergence primarily at the ideational and social value levels" rather than economic perspective. For example, the recognition of health, education, democracy [21] and women status [1] has been converged with the advancement of G2, which shows an identical sense of real wages and commodity prices in G1 but relatively weak convergence, but the policy adoptions are faced with problems and restricts due to the various background and institutional regimes. Achterberg and Yerkes (2009) [22] believe "countries are converging in the middle, with social democratic countries becoming more liberal and liberal countries becoming more social democratic" allowing for the welfare perspective. On the contrary, Khanna and Palepu (2004) [23], Dreher etal(2008) [24], Mishkin (2007) [25] reported that the convergence on corporate governance, government expenditures and financial services are limited in case of risks caused by globalization, such as financial crisis or chain effect and measures to resist the potential dangers of G2 on domestic economies should be implemented although welfare benefits may lose or citizens may suffer from kind of economic blockades.

Williamson (1996) [10], Vaio and Enflo (2011) [11] mentioned transport costs and trade policy are seemingly proximate factors to account for convergence in G1 as well as G2, and some fundamental causes or underlying factor including luck (or multiple equilibria), geographic and cultural differences, institutional variants are supposed to be considered and explored. Radice (2000) [5] thinks "globalization may be perceived as leading to convergence on a common institutional order". Globalization might be segmented and deepened in different types of institutional regimes. Developing a semi-global marketing strategy be advocated, which could generate "greater autonomy at the local level" [26].

3.3. Policy Implication

(1) If the maximization of economic efficiency is the ultimate target, the detrimental points of globalization towards language, education, democracy, national identity can be disregarded. However, actually, economic convergence and benefits of social or political dimensions have to be balanced by local governments, which will put policy makers in a dilemma.

(2) With the further convergence taking place in increasingly aspects, "the room for policy maneuvering is obviously reduced" [21], and market independence and autonomy intervention may be trapped, posing a tough choice in front of authorities.

(3) Global organizations should play a greater role and make more efforts to coordinate and control the convergence and drawbacks that will be crept into participating economies. However, historically, "policy co-ordination" [27] conducted by world organizations is hard to fulfill and maintain over long periods.

4. Conclusion

This paper has examined some prime factors of convergence with the first stage of globalization and discussed the complicated respects from convergence occurring in the second phase of globalization. More specifically, some new perspectives such as social and political dimensions and policy implications have been referred to. However, economic approaches to measuring globalization still remain to be indefinite provided that economic, social, and political perspectives are required to be included. Thus, policy makers in each economy may suffer bewilderment when making decisions to face up to the transformation of globalization and convergence.

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