Political institutions and the evolution of character traits

Jiabin Wu [*],[1]

Department of Economics, University of Oregon, United States

A R T I C L E   I N F O

A B S T R A C T

This paper argues that political institutions play an important role in influencing the evolution of character traits. We consider a population with two groups each with different character traits. A political institution provides the platform and a set of rules for the two groups to battle over the relative representativeness of their traits for the high positions in the social hierarchy. This political process affects the economic outcomes of the two groups and, subsequently their character traits evolve. We study how conducive different political institutions are to spreading character traits that induce better economic outcomes. Under "exclusive" political institutions, any trait can be prevalent. Therefore, a society can be trapped in a state in which traits associated with unfavorable economic outcomes persist. Under "inclusive" political institutions, evolution has stronger selection power. Only traits that result in the largest comparative advantage in terms of holding a high position can be prevalent.

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> *"It is always necessary to examine the possible bearing of deep-rooted social and economic changes upon the nature of the values held by the members of a given stratum or society."*
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> [Max Weber (1896)]

1. Introduction

A large body of work in the literature of political economy is devoted to understanding the role of political institutions in economic performance.[2] Most are premised on the assumption that the character traits of members of a society are

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* Correspondence to: 515 PLC, 1285 University of Oregon, Eugene, OR 97403, United States.
 E-mail address: jwu5@uoregon.edu.

[2] See for example, North and Thomas (1973), Olson (1982), March and Olsen (1984), North (1990), Przeworski and Limongi (1993), Saint-Paul and Verdier (1993), Alesina and Rodrik (1994), Persson and Tabellini (1994, 2003, 2008, 2009), Barro (1996, 1997), Bénabou (1996), Acemoglu et al. (2001, 2002, 2006), Tavares and Wacziarg (2001), Glaeser et al. (2004), Lizzeri and Persico (2004), Rodrik and Wacziarg (2005), Papaioannou and Siourounis (2008), Besley and Persson (2011), Acemoglu and Robinson (2012), among many others.

exogenous and fixed. However, historical evidence demonstrates that this is not the case and that political institutions have considerable influence on the evolution of character traits.[3]

Character traits, such as time discounting, risk aversion, social preferences, a work ethic, among others, are crucial for technology advancement and the emergence of more efficient economic institutions.[4] In order to better understand the long-term impacts of political institutions on economic outcomes, we first need to examine how political institutions shape the evolution of character traits. This paper attempts to address this issue by comparing and investigating the evolution of character traits under different political institutions.

We construct the following model.[5] A population is divided into two groups: a majority group in which agents carry a certain character trait and an alternative group in which agents carry a different character trait. The character traits of the two groups belong to a continuous trait space. Note that these two groups do not necessarily coincide with the groups defined by members' ancestries, ethnicity or cultural origins.[6] Each group acts as a voting bloc and is represented in a political institution. As argued by Congleton (2011), interest groups can be organized by the members' traits such as preferences, norms and ideologies. Furthermore, these groups can include members with various occupations and incomes and may have considerable influence on political decision making.

A society generally has different social positions which together constitute a social hierarchy. Some are granted power and privilege and are given leadership roles (e.g., civil servants or managers), while others are not.[7] Assume that there are two types of positions in the social hierarchy: high and low. A political institution provides a platform and a set of rules for the political representatives from the two groups to battle over the representativeness of their character traits for the high positions in the social hierarchy (to determine the allocation of high positions between the two groups). In particular, the set of rules determines the *de jure* distribution of political power between the two groups. Following recent works on political economy including Besley and Persson (2011) and Acemoglu and Robinson (2012), who emphasize the importance of the distribution of political powers on the economic consequences of different societies, we index different political institutions by their degrees of "inclusiveness." A political institution is more "exclusive" if the alternative group is excluded from high positions or faces barriers to acquiring high positions. A political institution is more "inclusive" if the political representatives from the two groups interact more equally to determine the allocation of high positions.[8]

After the allocation of high positions between the two groups is determined, agents from the two groups enter a random matching process that pairs each high position holder with a low position holder to engage in pairwise economic activities. The matching and interaction paradigm we develop follows the work of Alger and Weibull (2012, 2013).[9] Note that the interaction between positions and character traits is crucial to the economic outcome generated by each pair of agents as well as to how they divide the economic outcome.[10] We impose one weak and natural assumption on the dividing rule between each pair of agents: the agent with a high position has a larger share of the economic outcome than does the agent with a low position. The resulting economic outcomes in turn influence the evolution of character traits: the group with the higher average economic outcome expands, while the group with the lower average economic outcome shrinks.

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[3] For example, the "Americanization" policy in the early 20th century effectively induced cultural integration in the United States (see Kuran and Sandholm, 2008). Under some circumstances, immigrants' values may spread through an entire society because they have better opportunities to access scarce resources through political institutions. Here, the Chinese minorities in South-East Asia serve as good examples. As discussed by Landes (1998), "the same value thwarted by "bad government" at home can find opportunity else where, as in the case of China."

[4] As argued by Weber (1930), the spread of the "spirit of capitalism", including patience, prudence, frugality and a work ethic for both entrepreneurs and laborers, is the key to the rise of modern enterprises. See also the discussion by Doepke and Zilibotti (2008).

[5] If we consider preferences as an example of character traits, then our model closely follows those works on the indirect evolutionary approach (preference evolution) including Güth and Yaari (1992), Güth (1995), Bester and Güth (1998), McNamara et al. (1999), Sethi and Somanathan (2001), Ok and Vega-Redondo (2001), Van Veelen (2006), Dekel et al. (2007), Heifetz et al. (2007a, 2007b), Kuran and Sandholm (2008), Akçay et al. (2009), Alger (2010) and Alger and Weibull (2010, 2012, 2013). See Robson (2001) and Robson and Samuelson (2011) for a survey on another important approach to studying preference evolution.

[6] For example, as discussed in Landes (1998), in Thailand, the government strongly discourages separate Chinese schooling and many Chinese have taken Thai names to better fit in. In Malaysia, affirmative action urges Chinese minorities to take Malay partners. In this way, the industrious values brought by Chinese immigrants spread without ethnic or cultural boundaries.

[7] Guilds in the Middle Ages serve as a good historical example of a source of high positions in a social hierarchy. At the time, the guilds enjoyed certain privileges granted by the king or the state and had strong control over the urban economy (Acemoglu and Robinson, 2012). Civil positions in Ancient China are another examples because they were usually linked to land and wealth (the main channel through which Chinese citizens could achieve these positions was the imperial exam, which tested their knowledge of Confucian morals). As stated in Bai and Jia (2016), the exam system created a gentry class. In today's society, higher education and professional degrees are often associated with higher positions in the social hierarchy because most occupations corresponding to favorable economic outcomes require higher levels of education.

[8] The exclusive political institutions defined here are different to the extractive political institutions defined in Acemoglu and Robinson (2012), in which control rights are given to a small group of elites. In this study, we do not examine extractive political institutions.

[9] However, our paradigm is essentially different to theirs because their paradigm is only suitable for ex-ante symmetric interactions whereas ours is designed to handle ex-ante asymmetric interactions owning to the existence of different positions in the social hierarchy.

[10] For example, Akerlof (1982) pioneers the study of gift exchange and labor contracts and argues that labor workers' preferences for fairness should be considered, which induce more efficient production. Recent works in experimental economics such as Fehr et al. (2007) demonstrate that inequality aversion can lead to an informal contract between the employer and the employee which enhances productivity more than a formal contract does. Francois and Zabojnik (2005) analyze the role of trustworthiness in economic development. They argue that whether new technologies can be adopted and spread depends on whether firm owners trust contractors.