ELSEVIER

Contents lists available at ScienceDirect

## Journal of International Economics

journal homepage: www.elsevier.com/locate/jie



CrossMark

## Product-based cultural change: Is the village global?<sup>☆</sup>

Nicolas Maystre <sup>a</sup>, Jacques Olivier <sup>b</sup>, Mathias Thoenig <sup>c,d,\*</sup>, Thierry Verdier <sup>d,e</sup>

- <sup>a</sup> United Nations Conference on Trade and Development, E.10013, Palais des Nations, CH-1211 Geneva 10, Switzerland
- b HEC Paris, Department of Finance and GRECHEC, 1 rue de la Libération, 78351 Jouy en Josas, France
- <sup>c</sup> Faculty of Business and Economics (HEC), University of Lausanne, CH- 1015, Switzerland
- d CEPR, 77 Bastwick Street, London EC1V 3PZ, United Kingdom
- <sup>e</sup> Paris School of Economics-ENPC, PSE, 48 Bd Jourdan, 75014 Paris, France

#### ARTICLE INFO

Article history:
Received 22 July 2011
Received in revised form 22 August 2013
Accepted 17 October 2013
Available online 15 November 2013

JEL classification: F10 O10 Z1

Keywords: Culture Trade Persistence Homogenization

#### ABSTRACT

We provide a model of product-based cultural change where trade integration leads to cultural convergence. A standard trade model of Dixit–Stiglitz monopolistic competition is coupled with a micro-founded model of cultural dynamics. We show that access to varieties that are attached to a global cultural type changes the incentives of parents to socialize their children and transmit their type. The resulting increase in agents of the global cultural type leads to a magnification of the initial shock. A striking feature of the model is that even temporary shocks to openness may have permanent effects through the changing distribution of preferences in the economy.

© 2014 International Monetary Fund. Published by Elsevier B.V. All rights reserved.

#### 1. Introduction

Words like culture or values have long been absent from the vocabulary of economists. A new and rapidly influential strand of literature has remedied this absence and demonstrated the importance of such variables to explain the cross-section of a wide array of economic outcomes. This literature has however largely left aside the delicate topic of the endogenous determination of cultures and, therefore, issues that are the subject of intense debate among political scientists and sociologists such as: what is the impact of globalization on values and

 $\label{lem:email$ 

preferences; do cultural values get progressively homogenized and converge towards common patterns over the world, or is there an irreducible persistence of cultural specificities across communities?<sup>1</sup> The objective of this paper is to fill the gap between the two literatures and to argue that cultural values and economic outcomes are jointly determined.

The new channel we propose, which complements the channel identified in the existing literature on culture and economics, arises from the view that the consumption of differentiated goods – such as movies, music, books, cars, clothes, cosmetics, food, beverages, jewelry, etc. – conveys symbols that are valued differently by agents belonging to different cultures. As a consequence, trade-related supply shocks on these goods change the relative benefits of belonging to different cultures and thus affect the long-run distribution of values and preferences. An example of such product-based cultural change is the post-world war link identified by sociologists between the rise in mass consumption on the one hand, and the declining trend in religiousness and the

We thank the editor, Robert Staiger, two anonymous referees, conference and seminar participants at the ERWIT-CEPR, SUS-DIV CEPR, the department of Anthropology at UCL, SEM, T2M, RIEF, Egon-Sohmen-Symposium in Barcelona, WTO, SMU and the universities of Bocchoni, Geneva, Lausanne, Nottingham, Paris 1 and Zurich. We thank for their comments Alberto Alesina, Yann Algan, Pol Antràs, Frédéric Dalsace, Raquel Fernandez, Patrick Gaulé, Paola Giuliano, Rafael Lalive, Thierry Mayer and Fabrizio Zilibotti. Special thanks are due to Thierry Mayer for sharing his data with us. We acknowledge financial support from the SUS DIV European Network of Excellence on Diversity. Mathias Thoenig acknowledges financial support from the ERC Starting Grant GRIEVANCES-313327. The views and opinions expressed herein are those of the authors and do not necessarily reflect those of their respective organizations.

<sup>\*</sup> Corresponding author at: HEC Lausanne, Université de Lausanne, HEC, DEEP, CH-1015 Lausanne, Switzerland.

<sup>&</sup>lt;sup>1</sup> The case for cultural persistence is most vividly made by Samuel Huntington (1996) who emphasizes the lasting differences of values between Western and non-Western civilizations and the resulting geopolitical tensions. Sociologists, such as Ritzer (1993), argue instead that the strive for economic efficiency leads to standardization of production and consumption across countries. A third view is that globalization generates new cultural forms through a process of creolization (Nederveen Pieterse, 2004) or of creative destruction (Cowen, 2002).

erosion of traditional social norms experienced by Western countries on the other hand.  $^{\!2}$ 

Building on this example, Fig. 1 illustrates the link between trade and convergence of values we have in mind. We look here at attitudes towards religious denomination retrieved from the World Values Survey (WVS).<sup>3</sup> The units of observation for the histogram on the left of Fig. 1 are country-pairs for which we report the time evolution of an index of bilateral fractionalization of opinions, that is the probability that one individual drawn randomly in country i and another individual drawn from country j disagree on the WVS question about their affiliation to a religious denomination. The histogram suggests that while many country pairs have seen very little change in that probability of disagreement over the 1989-2000 period, there has also been a significant number of country pairs for which the probability of disagreement has gone down substantially but very few country pairs for which it has gone up substantially. More precisely the probability of disagreement has decreased on average by 1.9 percentage points over the 1989–2000 period, to be compared with the cross-country pair standard deviation of this probability of around 19 percentage points in 1989. We interpret this finding as suggestive of cultural convergence. The graph on the right of Fig. 1 illustrates in the panel dimension how part of this convergence process is potentially driven by international trade. Indeed this scatter plot represents the unconditional correlation between changes in bilateral trade openness and changes in bilateral fractionalization of attitudes towards religion. The correlation coefficient is highly significant and is economically large as the change in attitudes towards religion implied by the average increase in bilateral trade openness over the 1989-2000 corresponds to 83% of the convergence of attitudes towards religion observed during that period.

The short empirical section of the paper extends the results of the Fig. 1 to a wide set of opinions. We construct a measure of bilateral cultural distance based on country-pair fractionalization of opinions. We observe significant time variation in bilateral cultural distances over our sample period and a general pattern towards convergence. We then document that the time variation in bilateral cultural distances is correlated with variations in bilateral trade flows even after controlling for migration, information flows and country pair and time fixed effects.

The bulk of our analysis is dedicated to a simple theory of product-based cultural change which can rationalize these stylized facts. We borrow insights from psychology and the branch of marketing called consumer research and incorporate them into an otherwise standard economic model. Our theoretical framework has three building blocks. The first block corresponds to a standard economic model where firms produce differentiated products under monopolistic competition (Krugman, 1979; Helpman and Krugman, 1985). The second building block ties products to culture. We assume that (i) upon entry, firms anchor their products to a specific cultural type; (ii) agents have preferences which overweight consumption of products that convey symbols associated with their cultural type. The third block is a micro-founded model of cultural transmission à *la* Bisin and Verdier (2001, 2011).

The key insight of our theory is that the distribution of cultural types and the supply of (differentiated) consumption goods are codetermined at the equilibrium. Cultural types drive the demand for consumption goods but the supply of consumption goods has a feedback effect on cultural types. Hence any exogenous supply shock may have both short-run and long-run effects on culture. Focusing on the case of a

product market integration shock, we show that integrating two countries simultaneously generates a continuous increase in trade volume and a continuous decrease in bilateral cultural distances as observed in the data. This is because the removal of trade barriers increases the incentives of firms to anchor their products to cultural types common to the two countries and because of the two-sided interaction between supply of goods and distribution of types. We also show that the long-run effect of trade integration onto culture is larger when traded goods are more differentiated. This is because product differentiation drives the strength of the feedback effect. Finally, we show that a temporary increase in trade openness may have a permanent effect on the distribution of cultural types in the economy. This lock-in effect arises when multiple long-run equilibria exist under autarky but there is only one unique equilibrium under free-trade.

From a theoretical standpoint, our work is related to Van Ypersele and François (2002), Bala and Van Long (2005), Janeba (2004) and Rauch and Trindade (2009). However, in all these papers, cultural diversity is considered as an exogenous and static feature of the economy. By way of contrast, our analysis is dynamic in nature and provides a general framework for analyzing the joint determination of cultural distance and economic equilibrium. A similar joint determination is studied in Olivier et al. (2008) but under perfect competition and for the specific case where goods can be used to shape social networks. The two models yield a different set of empirical implications; the evidence we report providing much stronger support for the model with imperfect competition but no social network. Finally a similar "lock-in" effect of temporary trade shocks as in our model can be observed in Staiger (1995) and Devereux (1997) but through very different mechanisms from ours: sector specific human capital depreciation in Staiger (1995) and learning by doing externalities in Devereux (1997).

Our paper also provides an additional perspective in the current debate among economists on the possible sources of long-run persistence in economic outcomes. Over the past few years, two schools of thoughts have provided contrasted views on the issue. The first school, led by Acemoglu et al. (2001), emphasizes the role of institutions such as the judicial system or the enforcement of property rights. Institutions are shown to persist over the course of many centuries and are also shown to have a significant and robust impact on economic outcomes. The second school, led by Guiso et al. (2006, 2007, 2008, 2009), emphasizes instead the role of culture, and more specifically the role of values such as trust, social capital or religiousness. Distinguishing between the two hypotheses has proved delicate. For instance, Tabellini (2008a,b) provides a broad spectrum of cross-sectional evidence suggesting that the causality runs from values to institutions, Reciprocally, Alesina and Fuchs-Schündeln (2007), Landier et al. (2008) and Aghion et al. (2010) emphasize the impact of institutions on culture. Our results point in a different and complementary direction: we show that cultural values can exhibit higher frequency variations as they react to supply side shocks of the economy such as trade integration. All in all, this suggests that the long run pattern of economic performances, cultural values and institutions can perhaps be best viewed as a coevolutionary process between the three components.

The remainder of the paper is organized as follows. We first review selected work in anthropology, psychology and consumer research in Section 2 which motivates our underlying hypothesis that products convey symbols which can influence agents' values and preferences. We present the data from the WVS and construct measures of bilateral cultural distance in Section 3, which we then use to document the empirical link between trade and culture. We propose a simple model of product-based cultural change in Section 4. We study the equilibrium under autarky in Section 5 and the case of trade integration with two

<sup>&</sup>lt;sup>2</sup> Turner (2008) analyzes the struggle between consumerism and religiousness in all Western Europe over the 20th century. We interpret this episode as the fact that globalization increases the supply of secular goods. This tends to reduce the relative utility of being devout and finally induces over time a sharp decrease in the equilibrium fraction of religious agents. Regarding recent cultural evolution in India, Jones (2006) says: "There Rolex has replaced religion and a second unification is happening, in which the affluent young now define themselves by a shared consumer culture and not solely by caste, creed, and language. They are starting to marry within that subculture".

<sup>&</sup>lt;sup>3</sup> Question f024: "Do you belong to a religious denomination?" The binary answer is "Yes" or "No".

<sup>&</sup>lt;sup>4</sup> Spolaore and Wacziarg (2009) provide an intriguing third possibility: genetic distance seems to proxy for the missing persistent explanatory variable in cross-country income regressions. Desmet et al. (2011) argue that genetic distance plays the role of an instrument for cultural distance. Ashraf and Galor (2008) show that genetic distance is also correlated with economic outcomes in the pre-colonial times à *la* Acemoglu, Johnson and Robinson. They also argue in favor of a direct role of genetic diversity on economic outcomes.

### Download English Version:

# https://daneshyari.com/en/article/962309

Download Persian Version:

https://daneshyari.com/article/962309

<u>Daneshyari.com</u>