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## Cultural Change and the Migration Choice

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DISCUSSION PAPER SERIES

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## DISCUSSION PAPER SERIES

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# Cultural Change and the Migration Choice

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## ABSTRACT

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### Cultural Change and the Migration Choice

Cultural differences play an important role in shaping migration patterns. The conventional proxies for cross country cultural differences – such as common language, ethnicity, genetic traits or religion – implicitly assume that cultural proximity between two countries is constant over time and symmetric, which is far from realistic. This paper proposes a tractable model for international migration which explicitly allows for the time varying and asymmetric dimensions of cultural proximity. Similarly to Disdier et al (2010) we assume that the evolution of bilateral cultural affinity over time is reflected in the intensity of bilateral trade in cultural goods. Our empirical framework includes a comprehensive set of high dimensional fixed effects which enables for the identification of the impact of cultural proximity on migration over and beyond the effect of pre-existing cultural and historical ties. The results are robust across different econometric techniques and suggest that positive changes in cultural relationships over time foster bilateral migration.

**JEL Classification:** F16, F22, Z10

**Keywords:** migration, trade in cultural goods, gravity model

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# 1 Introduction

Harris Todaro's (1970) interpretation of migration flows in terms of the wage differential between sending and destination countries and the associated cost of the journey has been shown to be insufficient in explaining migration patterns. Indeed, the presence of fairly small migration flows – both within and between countries – despite very strong economic drivers such as unemployment and wage differentials (see Barro and Sala-i-Martin 1995) has shifted the focus of the literature away from economic factors. More attention is now given to non-pecuniary determinants of migration decisions such as cultural relationships.

Earlier empirical research has shown that measures of cultural proximity – e.g. bilateral linguistic, religious and genetic distance as well as colonial links – are often more important determinants of migration patterns than traditional economic variables.<sup>1</sup> The work of Belot and Ederveen (2012), in particular, provides sound empirical evidence on the central role of cultural distance in shaping migration patterns. They analysed the impact of several dimensions of cross-country cultural barriers using a set of indicators describing bilateral religious and linguistic distance, as well as survey-based composite measures of cultural distance such as the Hofstede or the Inglehart and Baker indexes, all of them fostering bilateral emigration rates. Similar proxies of cultural proximity have been found by Belot and Hatton (2012) to be more important determinants of educational selectivity in immigration than wage incentives or a selective immigration policy.

All these measures, however, have been challenged in their capacity to effectively capture some important dimensions of cultural relationships (see Shenkar 2001, Li et al 2017, Felbermayr and Toubal 2010 and Tung and Verbeke 2010), which we take as being particularly relevant for international migration. More specifically, they are unlikely to be able to fully capture a broader notion of cultural proximity which hinges on the acknowledgement that cultural relationships are *subject to variation over time*.<sup>2</sup> Measured at a single point in time existing measures of cultural proximity are considered to be constant: but this is not realistic as culture measured at the time of the migration decision may have changed by the time the culture is measured. Recent macro indexes of cultural distance based on Hofstede's cultural dimensions do not account for the time dimension (see Kaasa et al 2017) and they are mostly confined to European countries that are more culturally alike.<sup>3</sup> The assumption of *stability* is particularly unrealistic when we look at the last two decades characterized by growing exposure of citizens to foreign cultures through cross-border information flows, the globalization of mass communication and the role of social media. All these (and many other) channels may have contributed to reshaping national values/identities, as well as trust and affinity towards foreign cultures (see Tabellini 2008).<sup>4</sup> Of course, those changes in bilateral cultural proximity may or may not be reciprocated. The *symmetric nature* of cultural proximity is obviously very difficult to support, especially in the context of international migration. Symmetry in cultural proximity would imply, for instance, that the cultural barriers faced by Moroccans willing to move to

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<sup>1</sup> Although the notion of cultural distance has been explicitly defined by scholars, especially in the international business literature (see for instance Shenkar (2001)), for simplicity in this paper the terms cultural proximity, cultural affinity and cultural distance will be used interchangeably

<sup>2</sup> When introducing the dyadic determinants of international migration, Beine et al (2015) explicitly state “*the dyadic factors that influence migration costs can be both time-invariant, such as linguistic and cultural proximity, and time-varying factors.*” (Beine et al 2015, p.508)

<sup>3</sup> Also Micro proxies of cultural distance within the World Value Survey and European Value Survey provide a limited time variation.

<sup>4</sup> In this regard, Rapoport *et al.* (2017) found evidence of cross-country cultural convergence which is clearly at odds with the assumption of stability, but more in line with a convergence thesis, where cultural proximity increases over time as a consequence of citizens' exposure to foreign cultures (Webber 1969). In Rapoport *et al.* (2017) cultural convergence has been shown to be even more prominent after controlling for economic incentives for migration and for culturally-diverse countries.

France would be the same as for French migrants going to Morocco. As Shenkar (2001) pointed out there are no studies showing symmetry in bilateral cultural proximity, nor is there a reason to assume symmetry. The use of the standard proxies of cultural proximity clearly fails to account for these dimensions of cultural relationships and their consequences for the migration decision. This calls for further investigation on the role of culture as a determinant of migration patterns.

In this paper we propose a broader notion of cultural proximity, which accounts for changes in cultural relationships that may or may not depend on the historical or pre-existing cultural ties. In this conceptual framework, the transfer of norms, practices, identities and social capital through social remittances as well as exposure to foreign values and behavior may change how attractive would-be migrants find foreign cultures, regardless of pre-existing bilateral cultural ties (see for instance Levitt Lamba-Nieves 2011). These “*shocks*” to bilateral cultural proximity affect the migration choice as – for any given country of origin – they alter the distribution of relative cultural affinity towards potential destinations.

To date this is the first analysis that explores the relationship between cultural proximity and migration, fully accounting for the time varying and asymmetric nature of cultural affinity. True to our conceptual framework, we assume that the value of the bilateral exports of cultural goods reflects affinity towards the destination’s (exporter’s) culture for the citizens in the country of origin (importer). As shown by Disdier *et al.* (2010), bilateral cultural trade (as defined by UNESCO) is highly correlated with standard, symmetric and time-invariant measures of cultural proximity. These indicate the capacity/potential of this proxy to capture a broader notion of cultural affinity. Our proxy of cultural proximity enters a tractable model of international migration which allows for cultural affinity to vary over time.<sup>5</sup> Theoretically, we model the asymmetric bilateral moving costs as being mitigated by the time varying cultural proximity between origin and destination.

On the empirical level, relaxing the assumption of stability of cultural proximity implies that migration could in principle affect the evolution of cultural affinity over time and that current levels of cultural proximity are likely to be strongly related to historical cultural ties, introducing some endogeneity concerns. Our identification strategy addresses potential issues deriving from multiple sources of endogeneity by first instrumenting exports of cultural goods with average bilateral tariffs in the manufacturing sector and the imputed tariff revenues, which are plausibly exogenous with respect to migration. Also, to the best of our knowledge, this is the first contribution which utilizes a comprehensive set of fixed effects – namely origin\*time, destination\*time and origin\*destination FEs – within a gravity model applied to international migration, which enables us to the impact of time varying cultural proximity on emigration over and beyond the effect of pre-existing cultural and historical ties. Lastly, in our gravity specification we separately identify the impact of existing diasporas as they simultaneously affect the decision to migrate both through cultural proximity via the effect of cultural remittances as well as by lowering migration costs through network effects and visa costs or by increasing the probability of non-economic migration through family reunification programs (see Beine et al 2011).

The results suggest a positive impact on the time variance of cultural proximity on migration choice. In other words, positive changes in cultural proximity foster migration. This finding is robust across different econometric techniques and alternative classifications of cultural products. We also show that a shock in terms of changing cultural proximity has a much stronger effect on culturally distant country pairs. This suggests a non-linear effect of cultural proximity on migration over pre-existing cultural ties and the potential role of trade in cultural products in promoting cultural convergence.

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<sup>5</sup> A similar theoretical framework was included in a very early version of this paper (see Lanati Venturini 2017)

The rest of the paper is organized as follows. Section 2 presents a short overview of the related literature, while Section 3 introduces our comprehensive definition of cultural proximity. Section 4 outlines the theoretical framework, derives the econometric specification and describes the data utilized in the empirical analysis. Section 5 presents the main statistical results. Section 6 concludes.

## 2. Related Literature

Our contribution adds to the extensive literature on the determinants of international migration, which uses gravity models as the main empirical workhorse to identify the effect of those origin, destination and dyadic factors affecting migration decisions. Within this strand of literature, our empirical framework is similar to the one proposed by Ortega and Peri (2013), who employ a comprehensive set of fixed effects and find that international migration flows are highly sensitive to income *per capita* at destination and to bilateral migration policies. As stressed by Bertoli and Moraga (2013), the inclusion of fixed effects into the gravity setup accounts for the so-called multilateral resistance to migration. After all, the choice of a potential migrant to move to a given destination country does not, depend only on the attractiveness of the destination relative to the country of origin, “*but also on how this relates to the opportunities to move to other destinations*” (Bertoli and Moraga, 2013, p.79). Closer to the subject matter of this paper, Belot and Hatton (2012) show that cultural similarities and physical distance are more relevant drivers of educational selectivity in immigration than wage incentives or bilateral migration policies. A common feature of this strand of literature is that the causal effect of cultural distance on migration is mostly captured by dummies for common language (official or spoken) and former colonial ties (see Beine *et al.*, 2015). A notable exception is Belot and Ederveen (2012) who capture different aspects of cultural similarities through the use of composite indicators for cultural proximity, along with more standard measures of cultural barriers such as religious and linguistic affinity. Similarly, Guiso *et al.* (2009) include, among the proxies of cultural similarities, measures of religious, linguistic, genetic and somatic distance. Among these proxies, linguistic distance has attracted particular attention. In particular, Adserà and Pytliková (2015) constructed elaborate indexes of linguistic distance and they find that migration rates are higher between countries whose main official languages are closer and that linguistic proximity matters less when local linguistic networks are larger.

Even though all these measures aim at capturing multiple dimensions of cultural similarities – an approach which is more in line with a comprehensive notion of “culture” (see Straubhaar, 2002) – they implicitly assume that cultural proximity is symmetric and constant over time. To stress this argument even further, in reviewing the literature on gravity models for international migration, Beine *et al.* (2015) explicitly stated that cultural proximity is one of the most important “*time invariant*” dyadic components of bilateral migration costs. In other words, cultural proximity as a construct has coincided with the definition of *cultural distance*, whose capacity to capture all the important dimensions of cultural affinity has already been questioned in the international business and economics literature (see Shenkar (2001), Li *et al.* (2017), Felbermayr and Toubal (2010), Fiorini *et al.* (2017) and Tung Verbeke (2010)). In this regard, Felbermayr and Toubal (2010) used the Eurovision Song Contest (ESC) voting results as a proxy for cultural proximity and found a significant time variation in the awarded ESC scores, as well as a sometimes low degree of reciprocity even between countries with seemingly similar cultural attributes. Disdier *et al.* (2010) were the first to utilize trade in cultural products as a proxy for countries’ cultural proximity; they found that countries with similar cultural tastes have more intense trade relationships. Fiorini *et al.* (2017) combine these two contributions by applying cultural trade as a proxy for asymmetric and time varying cultural proximity to study its impact on FDI. Our analysis employs a similar conceptual framework to study the impact of the time variation of cultural affinity on international migration using exports in cultural goods as a proxy for cultural proximity.

### 3. Cultural proximity and Trade in Cultural Goods

#### 3.1 A more comprehensive definition of Cultural Proximity

However, numerous empirical studies employed proxies of cultural affinity which overlook its time varying and asymmetric dimensions. For instance, the pioneering work of Belot and Ederveen (2012) employed several refined measures of cultural distance – including a composite index based on the four Hofstede’s cultural dimensions, along with measures of linguistic and religious proximity – to estimate the impact of cultural barriers on international migration. The drawbacks associated with the definition of cultural distance have already been brought to the fore in economics and even more prominently in international business literature (see Shenkar (2001), Fiorini *et al.* (2017), Li *et al.* (2017), Tung and Verbeke (2010) and Felbermayr and Toubal (2010)). In particular, two limitations of this approach stand out, namely the assumption of *stability* and *symmetry*, relabelled by Shenkar (2001) as, respectively, the “*illusion of stability*” and the “*illusion of symmetry*”. In what follows we briefly discuss each of these limitations in the context of international migration and provide an alternative and willingly broader definition of cultural proximity which allows for both *time variation* and *asymmetry* in cross country cultural relationships.

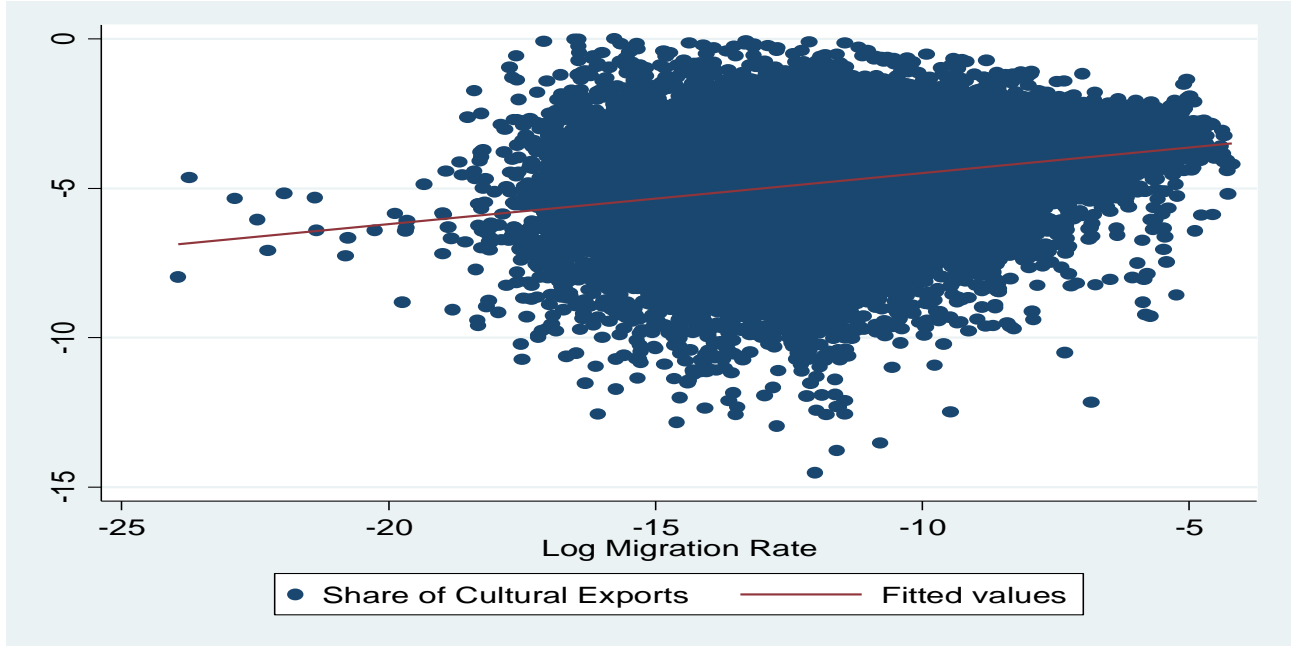
*Stability*: The four dimensions identified by Hofstede (2001) measure how far apart two cultures are, as well as other standard proxies of bilateral cultural proximity such as religious and linguistic proximity. These are measured, though, at a single point in time and they are assumed to be constant. However, cultural proximity evolves over time: the cultural affinity towards a specific destination measured at the moment of the decision to migrate may have changed by the time cultures are measured. For instance, social remittances from specific destinations may affect the extent to which populations in the countries of origin find those destinations culturally attractive. In other words, the distribution of the destination culture’s attractiveness across foreign countries changes over time; it is a function of several factors, including ideas and practices transferred to countries of origin. This variation in cultural proximity affects the migration choice as – for any country of origin – it alters the relative cultural affinity towards potential destinations.

*Symmetry*: As highlighted by Shenkar (2001), Tung and Verbeke (2010) and Li *et al.* (2017) cultural relationships, which are relevant in the context of international economic exchanges, are far from being symmetric. The construct of cultural distance obviously requires symmetry: the distance from A to B must be identical to the one from B to A. This implies that a would-be Moroccan migrant to France faces the same cultural distance as a French migrant willing to move to Morocco. But this assumption has found no support in the literature. On the contrary, Fiorini *et al.* (2017) and Felbermayr and Toubal (2010) found evidence of cultural asymmetry between country pairs. Their evidence points to an important role in the asymmetric dimension of cultural affinity in determining cross-country economic interactions and calls for a broader notion of cultural proximity capable of reflecting asymmetric affinity between two countries. Quantifying and analyzing the implications of the asymmetric nature of cultural proximity in the context of international migration is beyond the scope of this paper: our study provides a conceptual framework that allows for asymmetry in cultural relationships, but our empirical analysis is confined to one direction of cultural proximity, i.e. the affinity towards the destination’s culture for citizens in the country of origin.

*Our Definition*: In line with these approaches, we depart from the construct of cultural distance and propose a workable definition of cultural proximity that relaxes both these assumptions. We assume that members of the same national culture share common cultural traits and have a fairly homogeneous view on the attractiveness of other cultures (Li et al, 2017, Brewer and Brown, 1998).



**Figure 1: Relationship Between Migration Rate and Share of Cultural Exports**



Notes: Log-Log relationship between the bilateral share of cultural exports at  $t-1$  from the country of destination and the migration rate from the country of origin. The share is constructed as bilateral cultural exports over aggregate bilateral exports. 31362 observations, pairwise Pearson correlation coefficient = 0.25, statistically significant at 1%.

We define cultural proximity as:

$$CP_{in,t} = f(G_{in}, A_{in,t}) \quad (1)$$

where  $f$  is an increasing function of cultural proximity.  $G_{in}$  denotes the *time invariant* component of cultural proximity which we define as *cultural similarities*. It stands for pre-existing or historical cultural ties, whose proxies – such as past colonial relationships, linguistic, religious and genetic distance – have been extensively used in the literature to capture the impact of cultural barriers on migration (see Beine *et al.* 2015). Contrary to the model proposed by Fiorini *et al.* (2017), *cultural similarities* may or may not be symmetric. The key assumption here is that the parameter  $G_{in}$  is time invariant, so that  $G_{in} = G_{in,t}$ .  $A_{in,t}$  denotes the *attractiveness* of  $n$ 's culture for the population in country  $i$ .  $A_{in,t}$  is time varying and asymmetric, i.e. the identity  $A_{in} = A_{ni}$  may not be verified at any time  $t$ . The evolution of cultural proximity over time for any country pair depends on the  $A_{in,t}$  term, which may or may not be related to pre-existing cultural ties, i.e.  $A_{in,t}$  could potentially not depend on  $G_{in}$ . Indeed, individuals in country  $i$  can, in principle, attribute desirable characteristics to the culture of country  $n$  independently of actual similarity between the two cultures.<sup>6</sup>

### 3.2 Bilateral Trade in Cultural Goods as a Proxy for Cultural Proximity

Building on Disdier *et al.* (2010) we argue that bilateral trade in cultural goods can be used as a valid proxy for cultural affinity. Figure 1 plots the relationship between bilateral emigration rate from the

<sup>6</sup> We are well aware that both dimensions of cultural proximity can be affected by factors that may be related to migration. Diasporas, for instance, can, in principle, be associated to both dimensions of cultural proximity and simultaneously affect the migration choice through a network effect. These endogeneity issues will be addressed in our empirical specification presented in the next section.

importer country and the share of cultural exports from the country of destination. Our conjecture is that the correlation between migration and cultural exports is stronger because cultural preferences plausibly affect the utility derived from the purchase of cultural goods relatively more than their non-cultural counterparts. In other words, cultural preferences are better reflected in the purchase of cultural goods. In line with our hypothesis, Figure 1 shows a positive relationship: we impute this descriptive finding to the better capacity of cultural products in capturing cross country *cultural attractiveness*.

Furthermore, the time-varying and asymmetric nature of trade flows allows for the capture of these dimensions in bilateral cultural proximity. Given the purpose of this paper we are interested in cultural exports from destination  $n$  to country of origin  $i$  which proxies for  $A_{in}$ , i.e. the attractiveness of  $n$ 's culture for individuals in  $i$  at time  $t$ . In Appendix A2 we show that there is an empirical relationship between trade in cultural goods and the symmetric-time-invariant proxies of  $G_{in}$ , indicating that attractiveness is strongly correlated with similarity. However, investigating the link between *attractiveness* and *similarity* is beyond the purpose of this paper: the scope of our contribution is to add a time-varying and asymmetric dimension to bilateral cultural affinity and to test to what extent cultural proximity towards a destination affects the migration choice over and above pre-existing cultural ties.

## 4. Model and Econometric Specification

### 4.1 The Gravity Equation

The gravity specification builds on the simple theoretical model of international migration proposed by Adserà and Pytliková (2015) where the probability of migrating depends on key economic factors – such as a dyadic moving cost parameter and the income differential – and whose resulting econometric specification is particularly suitable for our research question.<sup>7</sup>

We assume that a potential immigrant chooses a particular destination country if his or her utility is the highest with respect to all available destinations. The utility attained by migrant  $k$  from moving to  $n$  from country  $i$  is logarithmic and given by:

$$U_{kin} = (y_{kn} - c_{kin})^\theta \exp(\varepsilon_{kin}) \quad (2)$$

Where the term  $(y_{kn} - c_{kin})$  stands for the net gain measured as the difference between income in destination  $n$ ,  $y_{kn}$ , and the cost of migrating from country  $i$  to country  $n$ ,  $c_{kin}$ , while  $\varepsilon_{kin}$  is the individual specific stochastic term. The variable  $c_{kin}$  includes moving costs, namely psychological and direct out-of-pocket costs and those associated with imperfect skill transferability. The probability of individual  $k$  from country  $i$  choosing a country  $n$  among  $N$  possible destinations can be written as:

$$\Pr\left(\frac{n_k}{i_k}\right) = \Pr[U_{ink} = \max(U_{ki1}, U_{ki2}, \dots, U_{kif})] \quad (3)$$

By assuming that  $\varepsilon_{kin}$  follows an i.i.d. extreme value distribution and  $k > 0$  and exploiting the approximation that  $\ln(y_{n,t} - c_{in,t}) \approx \ln(y_{n,t}) - \left(\frac{c_{in,t}}{y_{n,t}}\right)$ , we apply the results in McFadden (1974)

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<sup>7</sup> The model follows the “human capital investment” theoretical framework first introduced by Sjastaad (1962) and recently applied to model migration movements in Grogger and Hanson (2011) among others.

and write the log odds of migrating to destination country  $n$  versus staying in the origin country  $i$  as follows:

$$\ln\left(\frac{M_{in,t}}{P_{i,t}}\right) = \ln(m_{in,t}) \approx \theta(\ln y_{n,t} - \ln y_{i,t}) - \theta C_{in,t} \quad (4)$$

where  $M_{in,t}$  represents flows of individuals from  $i$  to  $n$  at time  $t$ ;  $P_{i,t}$  are the stayers;  $m_{in,t}$  is the emigration rate from  $i$  to  $n$  which is a function of the income differential between destination and origin and the migration costs  $C_{in,t}$  expressed as a proportion of destination income,  $C_{in,t} = (c_{in,t}/y_{n,t})$ . Departing from the structure of the cost function adopted in Adserà and Pytliková (2015) we model  $c_{in,t}$  as a decreasing function of  $CP_{in,t}$  and the migration networks  $Q_{in,t}$ , so that:

$$c_{in,t} = f(G_{in}, A_{in,t}, Q_{in,t}) \quad (5)$$

where  $A_{in,t}$  denotes the asymmetric, time-variant component of cultural proximity, which is proxied by the exports of cultural goods from country  $n$  to  $i$  at time  $t$ . Consistent with (1) we assume that  $c_{in,t}$  is non-symmetric, so that  $c_{in,t} \neq c_{ni,t}$ , hence also  $C_{in,t} \neq C_{ni,t}$ . Note that the symmetric time invariant component of cultural proximity,  $G_{in}$ , is captured by the same dyadic factors commonly used in the literature to control for moving costs (see for instance Beine *et al.* 2015 and Ortega & Peri 2013). The time varying variable  $Q_{in,t}$  is included as the networks of immigrants may affect moving costs through the information channel, attracting immigrant flows, predominantly in the form of family reunification. Networks may also be an indicator of cultural proximity, since larger immigrant communities are likely to be associated with common cultural characteristics between hosting and origin countries.<sup>8</sup>

#### 4.2 Econometric Specification

Plugging (4) into (5) the econometric model can be expressed as:

$$\ln(M_{in,t}) = S_{i,t} + S_{n,t} + S_{in} + \ln(Xcult_{ni,t}) + \ln(Q_{in,t}) + u_{in,t} \quad (6)$$

where  $Xcult_{ni,t}$  is the bilateral exports of cultural goods from the destination country  $n$  to the country of origin  $i$  at time  $t$ . The assumption behind the model of Adserà and Pytliková (2015) implies that the relative probabilities of two alternative locations only depend on the characteristics of those two alternatives. However, our econometric specification is rich enough to be consistent with more general distributional assumptions of the error term  $u_{in,t}$  (see Beine *et al.* (2015)). The inclusion of  $S_{i,t}$  and  $S_{n,t}$  - which are respectively, origin-year and destination-year fixed effects - allows us to capture the “*multilateral resistance to migration*” for bilateral migration flows. Put in other terms it is possible to capture the impact of the influence that the attractiveness of possible destinations exerts on the decision to migrate to a given destination.<sup>9</sup> In particular, the variable  $S_{n,t}$  absorbs the average

<sup>8</sup> As Beine *et al.* (2015) pointed out a failure to account for the networks effect can lead to an omitted variable bias. For instance, Belot and Ederveen (2012) found that the effect of their proxies for cultural proximity – with the exception of linguistic and religious distance – became statistically insignificant as the network variable was included in the specification.

<sup>9</sup> This strategy allows the monadic components of the gravity specification in the denominators to be absorbed by the origin\*time fixed effects, making the inclusion of denominators in the specification derived from Equation (4) redundant. These components include, for instance, the population of the country of origin in the dependent variable  $P_{i,t}$ . Hence, using migration rates and migration flows as dependent variable with origin time fixed effects will leave the results unaffected. Other monadic components that are controlled away are the income of country of destination  $y_{n,t}$ , the expectations about the evolution of the economic conditions in the countries of origin and destination (Bertoli *et al.*

time-varying tightness of migration entry laws in every destination, which was found to have a significantly negative impact on immigration flows by Ortega and Peri (2013).

In order to better isolate the time varying impact of cultural affinity on emigration we also include origin-destination fixed effects  $S_{in}$  which absorb all bilateral specific factors affecting migration.<sup>10</sup> For the purpose of this paper the inclusion of  $S_{in}$  is important for two main reasons:

- $S_{in}$  allows us to identify the effect of *cultural proximity* over and above the symmetric and pre-determined bilateral cultural ties. The current level of cultural proximity between country-pairs is likely to be related to the “historical” component of their cultural relationship (see Appendix A2), which may not be entirely captured by the time invariant proxies of  $G_{in}$  commonly included in the literature, such as colonial ties or linguistic, religious and geographical distance. This implies that not accounting for initial conditions may lead to biased estimates due to omitted variable bias (see Baier and Bergstrand, 2007).
- The inclusion of dyadic fixed effects restores the cross-sectional independence of the error terms (see Bertoli and Moraga (2015)). Indeed, if we define  $b(i)$  as a nest of countries  $i$  characterized by similar levels of cultural proximity with  $n$ , a bilateral shock between  $n$  and  $i$  may introduce a correlation in the stochastic component of Equation (6). For instance, the impact of a more restrictive visa policy in the UK towards Moroccans will affect the relative attractiveness of other potential destinations which we realistically assume as being highly dependent on the cultural proximity between Morocco and third countries (i.e. on whether or not they belong to the same nest  $b(i)$ ). In other words, if the unobserved components that create interdependencies across cross-sections within nests are correlated with the included regressors, the OLS estimator will be biased and inconsistent. Bertoli and Moraga (2015) restored the cross-sectional independence of the error terms through the inclusion of origin-nest dummies. Similarly, this paper proposes a richer analysis in which we generate a nest for each country-pair through  $S_{in}$ , alleviating potential estimation problems deriving from an incorrect specification.

### 4.3 Endogeneity Concerns

An issue arising when estimating Equation (6) is the potential endogeneity of trade in cultural goods. Whether this covariate is correlated with an unobserved component is the main concern. In addition, since migration and trade are likely to be closely connected the correlation between the two variables might be due to – other than the omitted variables we do not control for – reverse causality: migrants may promote trade with their country of origin as well as cultural convergence (see for instance Gould 1994 and Rapoport et al. 2017).

Our analysis aims to address the endogeneity issue in four ways:

- We include a comprehensive set of fixed effects to control for unobserved dyadic time-invariant factors and unobserved time-varying country-specific factors that drive both cultural proximity and migration flows. We are able to properly identify the causal mechanism between cultural exports and emigration through the inclusion of country-pair fixed effects. To the best of our knowledge, this is the first contribution to apply a gravity model to international migration combining a full set of destination\*year, origin\*year and destination\*origin FEs in the spirit of Baier and Bergstrand (2007) and Disdier *et al.* (2010). Finally, to do more to alleviate the problems associated

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(2013)), country specific migration policies (Ortega and Peri (2013)) and environmental factors (Beine and Parsons (2015)).

<sup>10</sup> This is a very demanding specification, but it can be simply estimated using the *reghdfe* STATA command introduced by Sergio Correia which employs an iterative method to solve the two-way Fixed Effect (FE) problem with unbalanced data and very large numbers of fixed effects. It also allows for clustered standard errors (for any information on the *reghdfe* command see Correia 2017).

with omitted variable bias we include in the specification total aggregate bilateral imports which partially control for time varying bilateral contacts between destination and origin.

- Similarly to Aleksynska and Peri (2014), we use the fact that the value of bilateral trade labeled as “*cultural*” according to UNCTAD classification,  $Xcult_{ni,t}$ , is equal to the aggregate bilateral trade  $X_{ni,t}$  multiplied by the correspondent share of bilateral cultural flows  $\alpha_{ni,t}$ . Specifically,  $Xcult_{ni,t} = \alpha_{ni,t} * X_{ni,t}$ . Hence, by taking logs and using log properties, we can separate the effect into two terms:  $\ln(Xcult_{ni,t}) = \ln(X_{ni,t}) + \ln(\alpha_{ni,t})$ . The advantage of this type of specification is that it builds on previous studies examining the trade-migration nexus, which normally included the log of aggregate trade as a dependent variable or a dyadic control in a gravity setup, depending on the direction of causation<sup>11</sup>. Second, in our pooled OLS setting, aggregate bilateral trade absorbs common factors that affect aggregate trade and migration, allowing us to isolate and disentangle the extra impact of the cultural products on migration flows within the same specification.

- The variable of interest – namely exports of cultural goods – is predetermined with respect to emigration flows, which is likely to (at least) attenuate the issue of reverse causality. The same “*lagged approach*” applies to the other controls such as the impact of immigrant stocks ( $Q_{in,t}$ ), in line with the analysis of Beine and Parsons (2015).<sup>12</sup>

- We propose an IV strategy where we instrument the flows of exports in cultural goods with the average bilateral tariffs in the manufacturing sector (source WITS, World Bank), applied by the importer and the corresponding imputed tariff revenues. To the best of our knowledge, this is the first contribution that utilizes an IV strategy to study the causal relationship between cultural proximity and migration flows.<sup>13</sup> Tariffs are plausibly unrelated to the emigration flows and highly correlated to trade flows. Similarly to Campaniello (2014), the identification strategy in this paper hinges upon the assumption that bilateral tariffs do not depend on migratory flows. In other words, we assume that governments set the level of tariffs to affect only trade flows, but not migration inflows. Figure (2a) and (2b) provide an indication about the validity of average tariffs in the manufacturing as a valid instrument for our econometric analysis. The figures combined indicate a clear negative correlation of tariffs with trade in cultural products, while there’s no evidence of a significant correlation of bilateral tariffs with the corresponding bilateral migration flows. In this regard, the squared partial correlation is very low (0.002), indicating that only a tiny proportion of variance of bilateral flows of migrants can be explained by tariffs. The under identification, and weak identification tests conducted and presented in Table 3 confirm the strength of the instrument.

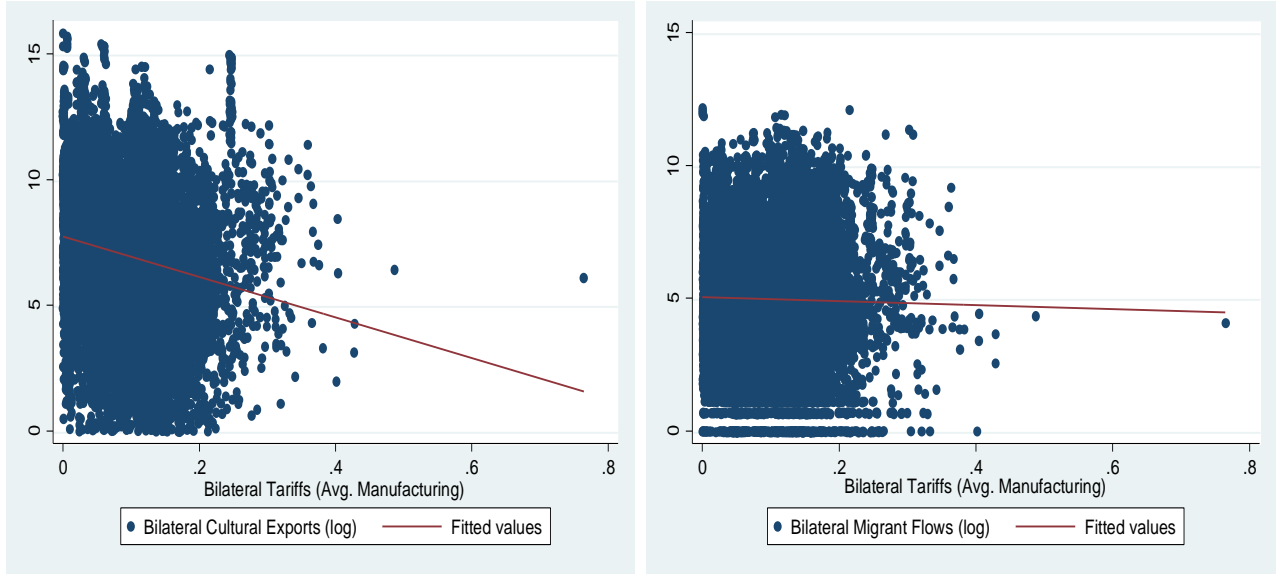
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<sup>11</sup> See Campaniello (2014), for the export effect on migration; see Aleksynska and Peri (2014), Girma and Yu (2002) and Gould (1994) for the other direction of causation

<sup>12</sup> As pointed out by Beine and Parsons (2015) another econometric issue in this gravity setup is the potential endogeneity of the network effect, which is proxied by the stocks of migrants born in  $i$  and resident in  $n$ . The network effect is predetermined with respect to migration flows, so the reverse causality argument should not be an important issue here. In support of our econometric setup, Beine *et al.* (2011) find that the network coefficient is robust to reverse causality using an IV strategy. Lastly, Beine and Parsons (2015) augment their gravity specification with the aim of capturing at least part of the omitted variables, which are both correlated with the error term and with the stocks of migrants. Their findings confirm the exogeneity of their predetermined network effect.

<sup>13</sup> Average Tariffs applied by EU countries have already been used as an instrument to address the potential endogeneity of bilateral aggregate trade flows in its relationship with migrants’ stocks by Campaniello (2014).

**Figure 2: Correlation of Average Tariffs with (a) Cultural Exports and (b) Migrant Flows**



Notes: Correlation between average bilateral tariffs in the manufacturing (in %) and (a) log of cultural exports (left hand side) and (b) log of bilateral migration outflows. The correlations refer to the smaller IV sample which includes 148 countries of origin and 22 countries of destination for the period 2004-2013.

#### 4.4 Data

The analysis uses data for 30 OECD countries of destination and for 185 countries of origin in the period 2004-2013.<sup>14</sup> The sample composition is similar to the work of Adserà and Pytliková (2015) and more comprehensive than other contributions that focus on the impact of cultural proximity on migration decisions, such as Belot and Ederveen (2012) and White (2013). The complete list, along with a short description of the variables employed in the statistical analysis, is presented in Appendix A2, while the summary statistics of the main variables (including instruments) are outlined in Table 1.

Our main variable of interest is trade in cultural goods. Trade data are from the BACI dataset of CEPII, which provides the bilateral values of exports in the HS 6-digit product disaggregation, for more than 200 countries since 1995. A crucial issue for our analysis concerns the definition of “cultural goods”. In line with the definitions provided by UNESCO and UNCTAD we define cultural products as those goods “conveying ideas, symbols and ways of life to those who consume them (some of which may be subject to copyrights), and whose production requires some input of human creativity” (UNESCO 2009, UNCTAD 2010) At the empirical level, we use the classification of cultural/creative products proposed by UNCTAD. Appendix A3 provides the motivations of why we prefer this classification as the main workhorse for our empirical analysis, while in Appendix 4 we list all the domains and product codes labelled as cultural/creative according to both UNCTAD and UNESCO classification.

In the IV analysis we instrument exports of cultural products with the average bilateral tariffs applied in the manufacturing sector and the imputed tariff revenues from cultural trade. The average of bilateral tariffs is obtained as the simple mean across EORA manufacturing sectors.<sup>15</sup> As for the rest of the variables employed in the statistical analysis, the migration flows and migration stocks are from the OECD’s International Migration database. Since we are interested in the determinants of migration decisions we use the inflows of foreign population by nationality in a given year as the

<sup>14</sup> The sample refers to the specification with the full set of fixed effects (Column 3 in Table 2).

<sup>15</sup> The list of EORA manufacturing sectors include: *Electrical and Machinery, Food & Beverages, Metal Products, Other Manufacturing, Petroleum, Chemical and Non-Metallic, Textiles and Wearing Apparel, Transport Equipment, Wood and Paper.*

dependent variable. This definition implies that we are including “*all foreign-born (or in some cases foreign nationals) who come to the country to reside there and not for temporary tourism, study, or business reasons*” (Ortega Peri, 2013). We include the stocks of bilateral immigrants resident in the countries of destination among the covariates, since they capture the role of networks in shaping international migration flows (see Beine *et al.*, 2015). Standard Proxies for migration costs, such as *weighted distance*, *common language*, former colonial *relationships*, *common legal origin*, are from CEPII, while GDP *per capita* in PPP Constant US dollars are from the World Bank. More refined measures of pre-determined cultural proximity such as *linguistic* and *genetic distance* are from Adserà and Pytliková (2015) and Melitz and Toubal (2014).

## 5. Results

### 5.1 Benchmark Estimates

The estimates of Equation (6) are presented in Table 2. Across specifications we progressively allow for lower degrees of variability in our identification data by gradually augmenting the number of fixed effects. Column (1) includes a reduced set of origin-year and destination dummies which capture time-varying factors at origin and time-invariant factors at destination, including unobserved heterogeneity in cultural traits between migrants and non-migrants. This specification is very close to the predictions of the model proposed by Ortega and Peri (2013). Our parameter of interest, the coefficient of  $\ln(Xcult_{ni,t-1})$ , suggests a significantly positive relationship between affinity of country  $i$  towards country  $n$ 's culture and bilateral emigration from origin  $i$  to destination  $n$ . All the gravity controls are significant and have the expected sign. Income *per capita* at destination is confirmed as an important driver of migration flows, while the network effect is positive and its magnitude is in line with previous studies (see Beine et al. 2011; Beine and Parsons 2015; Bertoli and Fernandez-Huertas Moraga 2015). This result corroborates the large consensus in the literature on diasporas as the most important dyadic determinants of migration flows. Controlling for heterogeneity at destination-year level leaves our results substantially unaffected. The inclusion of destination-year fixed effects in Column (2), meanwhile, does not alter the coefficients of any of the dyadic explanatory variables.

These two specifications, however, do not tell us whether the effect of cultural proximity on the migration choice is only driven by historical and pre-existing *cultural similarities*. In other words, we cannot detect whether the evolution of cultural relationships over time plays a role in affecting migration decisions, as the time invariant component of cultural proximity,  $G_{in}$ , may act as confounding factor for the impact of  $A_{in,t}$ . To address this issue, we include dyadic fixed effects  $S_{in}$  which control for all time invariant bilateral factors, such as geographic barriers and pre-existing cultural ties. The results reported in Column (3) suggest that – despite the loss of identification power due to the large number of fixed effects introduced – the time-varying determinants of migration remain significant. In particular, the network coefficient retains the positive sign but it lowers considerably in terms of magnitude, with a semi-elasticity of approximately 0.09 and statistical significance at the 1% level. More importantly for our purposes, the evolution of bilateral cultural proximity over time emerges as a significant driver of international migration: a “positive shock” in cultural proximity represented by an increase in cultural exports by 10% leads to a 0.13% increase in the bilateral migration rate after controlling for all the dyadic and time invariant factors affecting migration decisions. In other words, *cultural attractiveness* affects the migration choice over and above the pre-existing *cultural similarities*. This sheds some light on the importance of accounting for the evolution of cross country cultural relationships and their linkages with recent migration phenomena. For instance, the dramatic 41% increase in international migrants from 2000 to 2014

may at least partially be explained by a trend of cultural convergence associated with globalization.<sup>16</sup> Our results are consistent with such an interpretation.

The results hold when estimating the gravity equation with PPML, which provides consistent estimates in the presence of heteroscedasticity and performs well when the dependent variable has a relatively large share of zeros (Santos Silva and Tenreyro (2006, 2011) and Bertoli Moraga (2015)). In our sample the share of zeros is rather small, it represents only 6% of the observations. By comparing Columns (3) and (4) the gap in terms of magnitude across the two econometric techniques is fairly small. We can, therefore, safely conclude that heteroskedasticity is not an issue and that the model appears to be well specified.<sup>17</sup> The last two Columns of Table 1 enrich the gravity specification by, respectively, adding total bilateral imports as an additional control (Column (5)) and by decomposing exports in cultural products into the share of cultural products and total bilateral exports (Column (6)). The findings suggest that only exports are positively associated with the migration choice, with cultural exports having an impact above and beyond the correspondent aggregate flows.

### 5.2 Robustness Checks: 2SLS and UNESCO Classification

*2SLS* - The results presented in Table 2 are consistent with different sets of fixed effects and across econometric techniques. However, the reported estimates may still be biased because of reverse causality. To address the potential endogeneity of trade in cultural goods we instrument  $\ln(Xcult_{n,t})$  with the average bilateral tariffs in the manufacturing sector applied by the importer and the correspondent imputed tariff revenues. The sample size for this IV exercise is reduced due to the tariffs dataset which does not provide information on all the country pairs included in our OLS sample.<sup>18</sup> The second stage estimates are reported in Table 3, while the first stage along with the tests for the validity and strength of instruments are presented in Appendix A1. The IV results are very close to the benchmark estimates reported in Table 2. This holds for different sets of fixed effects and adds evidence and consistency to our predictions on the importance of cultural changes on migration decision.

*UNCTAD vs UNESCO Classification* - Measurement error can bias the estimated impact of our parameters of interest. Indeed, the cultural content embodied in different categories of cultural goods may reflect different degrees of bilateral cultural proximity. In Table 4 we compare the benchmark findings reported in Table 2 with the correspondent estimates obtained with the “core” UNESCO classification of cultural products. The products identified by UNESCO as cultural goods are arguably characterized by a larger cultural content compared to the classification proposed by UNCTAD. However, as noted in Section 3.4, UNESCO’s classification implies the use of a more limited time span and is less representative of the cultural products traded by the South. Given the shorter time coverage we are not including our full set of FEs since the more limited information in the UNESCO sample would create problems in terms of identification power. Hence, we compare the two classifications only with country-year fixed effects. The results indicate that using a different classification does not alter our benchmark estimates and our main conclusions remain unchanged.

### 5.3 Extensions

This section proposes two extensions to the analysis conducted so far. We test whether the role of the time varying component of cultural proximity changes (a) at different levels of pre-existing cultural similarities and (b) when we account for the long-lasting effect of cultural goods in favoring cross-cultural convergence.

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<sup>16</sup> Source: UN data

<sup>17</sup> See Head & Maier (2014).

<sup>18</sup> The IV sample reduces the numbers to 22 countries of destination (exporter) and 148 countries of origin (importer).



Table 5 explores the variation of the role of exports of cultural goods on emigration for different levels of pre-determined cultural affinity. We divide our sample according to the degree of cross-country cultural affinity based on linguistic and genetic distance. In order to preserve enough identification power and to attenuate the selection bias we split the sample into, respectively, two almost identical subgroups using the median of *MaxPAll*, *fst\_distance\_dominant* from Adsera Pytlikova (2015) and *lp2* from Melitz Toubal (2014).<sup>19</sup> The results suggest that time contingent shocks to cultural proximity only play a role when historical cultural similarities between country pairs are relatively weak. This finding suggests a non-linear effect for cultural proximity on migration over pre-existing cultural ties and a potential role for trade in cultural products in promoting cultural convergence. In particular, the evidence is consistent with a relationship of substitutability between the time-contingent, asymmetric and time-invariant, symmetric dimensions of cultural proximity in triggering migration, with the former operating as a bridgehead between otherwise culturally distant countries. A plausible explanation is that the cultural content embodied in these types of products enhances bilateral cultural affinity through what Tabellini (2008) defines as the *horizontal transmission of values*. The consumption and diffusion of cultural goods in countries of origin can contribute to transferring exporter's cultural traits, making the culture at destination more attractive, better known, and more widely accepted.

In Table 6 we explore more closely this potential long-lasting role of trade of cultural goods in favoring cross-country cultural convergence and its indirect impact on the decision to migrate. More specifically, we test whether the intensity of long-lasting bilateral cultural relationships have a stronger effect on migration. We are well aware that the transmission of values which shapes the utility of would-be migrants takes time (see Cavalli Sforza, 2001). We are also aware that the potential resulting effect induced by cultural exports – along with other factors – on the decision to migrate is not immediate.<sup>20</sup> For instance, the effect of traded movies on cross-country cultural pervasiveness is neither instantaneous or brief; rather, movies can be repeatedly watched and broadcast once purchased. Hence, our empirical strategy accounts for the recent history of bilateral trade relationships between  $n$  and  $i$  by simply considering the impact of the cumulative exports of cultural products from destination  $n$ , so that:

$$Xcult_{ni,t} = \sum_t^{t-s} Xcult_{ni,t} \quad (7)$$

This strategy allows for us, at the same time, to attenuate the distortion due to business cycle factors and measurement error associated to trade data. We initially set  $s = 5$  while the third column reports the correspondent estimates with  $s = 9$ . Interestingly, as  $s$  goes up the impact of cultural exports tends to increase. In other words, when we add past bilateral cultural exported goods to  $Xcult_{ni,t-1}$  the impact of our variable of interest on the decision to migrate at time  $t$  gets larger and larger. This finding is consistent with the hypothesis of a long-lasting effect of cultural products on bilateral cultural affinity.

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<sup>19</sup> The choice of *MaxPAll* as a measure of linguistic proximity is due to the relatively larger number of observations available compared to other similar proxies included in Adsera Pytlikova (2015). *Lp2* is considered to be better founded by Melitz and Toubal (2014) and a better basis for reasoning and their experiments among other similar proxies.

<sup>20</sup> Of course, cross-country cultural transmission of values takes place in a variety of ways, including the use of social networks and the internet. However, within the time coverage of our broad sample the use of the internet was rather limited and much less developed worldwide than one could think. Indeed, in 2005, only 16% of the entire world population used the internet, the same figure only increased to 40% by 2014 (Source: International Telecommunications Union).

## 6. Conclusions

Cultural barriers have been identified as one of the main drivers of international migration. They explain patterns of international migration which cannot be explained by merely looking at differences in terms of economic indicators. In other words, cultural factors help to address the so-called “immobility puzzle”, which we can define – paraphrasing Treffer (1995) – as “*the case of missing migration*”, i.e. very low migratory responses to large unemployment and wage differentials. In this context, proxies for cultural proximity such as linguistic and religious distance, along with more refined indicators, capturing (at least partially) the cultural orientation of countries, were found to have a positive impact on migration flows, after controlling for income differentials.

However, the common characteristics of these proxies – and, more generally, one of the implicit assumptions associated with international migration gravity models – is that cultural proximity is assumed to be symmetric and time invariant. These assumptions appear particularly strong and unrealistic when looking at the migratory patterns of the last two decades, given the growing exposure of citizens to foreign cultures through cross-border information flows, the globalization of mass communications and the rise of social media. All these channels may have affected the degree of cultural affinity of citizens towards potential destinations, without this affinity being necessarily reciprocated.

In this paper we relax these assumptions and we propose a broader definition which explicitly accounts for the asymmetric evolution of cross-cultural relationships over time. In line with Disdier *et al.* (2010), we use bilateral trade in cultural goods as a proxy for asymmetric and time-dependent cultural proximity. More precisely, we assume that the value of the bilateral exports of cultural goods reflects affinity towards the destination’s (exporter’s) culture for the citizens in the country of origin (importer). Our analysis contributes to the literature as the impact of the asymmetric and time-varying dimension of cultural proximity was too little studied in the literature on migration. The few existing studies on the impact of cultural barriers on migration choices were, meanwhile, predominantly focused on OECD countries as the point of origin of migrants, leaving out the whole spectrum of developing countries where the impact of cultural proximity on the decision to migrate might be particularly relevant.

Relying on a comprehensive set of high dimensional fixed effects and controlling for the size of diaspora, we find that the time variance of cultural proximity helps explain international migration. More specifically, when accounting for pre-existing bilateral cultural ties, an increase of cultural affinity towards a potential destination enhances bilateral migration flows towards that destination.

The results are robust across several robustness checks, including an IV strategy where exports of cultural goods are instrumented with tariff-related measures. The positive impact of cultural proximity is found to be even stronger for culturally diverse country pairs, when the long-lasting effect of cultural goods in favoring cross-cultural convergence is taken into account.

This paper leaves at least three interesting avenues for future research. First, our analysis sheds new light on the time varying impact of cultural proximity from the side of the origin of migrants. Further investigation can be done to analyse the destination side mechanisms of cultural proximity in relation to migration choices, namely the potential impact of affinity towards the culture of the country of origin on the decision to migrate. Second, a parallel interesting avenue for further research may be to investigate the role of cultural proximity on the integration of migrants in destination countries. Third, our findings suggest a stronger positive impact from exports of cultural goods when historical cultural similarities between country pairs are relatively weak. The evidence is consistent with a relationship of substitutability between time-contingent and time-invariant dimensions of cultural proximity in

triggering migration, with the former operating as a bridgehead between otherwise culturally distant countries. Further research can be conducted to study the role of the trade in cultural goods in shaping cultural values/identities and triggering cultural convergence.

**Table 1 – Summary Statistics**

Sample	Full			IV		
Variable	Mean	Median	St. Dev.	Mean	Median	St. Dev.
$\ln(EM_{in,t})$	5.077	5.056	2.492	4.967	4.905	2.503
$\ln(Xcult_{ni,t-1})$	7.210	7.304	3.180	6.902	6.953	2.984
$\ln(Q_{in,t-1})$	7.824	7.773	2.622	7.799	7.679	2.642
$\ln(dist_{in})$	8.433	8.674	0.912	8.694	8.910	0.732
$Colony_{in}$	0.047	0	0.212	0.054	0	0.226
$Lang_{ni}$	0.120	0	0.325	0.129	0	0.336
$Comleg_{in}$	0.222	0	0.415	0.224	0	0.417
$AvgTariffs_{in,t-1}$	-	-	-	0.104	0.101	0.066
$\ln(TariffsRev_{ni,t-1})$	-	-	-	4.284	4.322	2.967
Obs	15062	15062	15062	10369	10369	10369

*Notes:* Data on Bilateral Trade are expressed in thousands of US Current Dollars. Data on average tariffs are expressed in % and calculated as sample mean over the EORA manufacturing sectors.

**Table 2 – Benchmark Results: Impact of Cultural Exports on the Emigration Rate**

Estimator	(1) OLS	(2) OLS	(3) OLS	(4) PPML	(5) OLS	(6) OLS
Dependent Var.	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$	$EM_{in,t}$	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$
$\ln(Xcult_{ni,t-1})$	0.072*** (6.56)	0.072*** (6.56)	0.013** (2.26)	0.044*** (2.62)	0.013** (2.26)	
$\ln(\alpha_{ni,t-1})$						0.012** (2.16)
$\ln(X_{ni,t-1})$						0.028** (2.01)
$\ln(X_{in,t-1})$					-0.000 (-0.10)	
$\ln(Q_{in,t-1})$	0.553*** (13.01)	0.553*** (12.86)	0.092*** (3.26)	0.073* (1.74)	0.094*** (3.24)	0.098*** (3.28)
$\ln(dist_{in})$	-0.484*** (-9.67)	-0.489*** (-9.72)				
Colony <sub>in</sub>	0.369*** (2.90)	0.356*** (2.77)				
Lang <sub>ni</sub>	0.391*** (4.79)	0.399** (4.64)				
Comleg <sub>in</sub>	0.094* (1.67)	0.091 (1.62)				
$\ln(GDPpc_{n,t})$	1.103*** (2.87)					
$S_{i,n}$			X	X	X	X
$S_{n,t}$		X	X	X	X	X
$S_{i,t}$	X	X	X	X	X	X
$S_n$	X					
$S_t$	X					
$N$	15062	15062	15062	16142	14909	15062
$R-sq$	0.90	0.90	0.98	0.99	0.98	0.98

$t$  statistics in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors are clustered by country pair. The model includes the intercept.

From the third to the sixth columns the model includes also country-pair FEs and all the covariates that are time invariant are automatically dropped. The OLS estimates are obtained with the STATA command *reghdfe* provided by Sergio Correia which allows for the inclusion of high dimensional fixed effects. The PPML estimates are obtained with the STATA command *ppml\_panel\_sg* provided by Thomas Zylkin (see Larch et al 2017 for more information on this STATA command) The observations which belong to groups with all zeros or missing values are automatically dropped. The dependent variable in the OLS specification is the log of the bilateral emigration rate; the PPML model includes the zero emigration rates as the dependent variable is non-logarithmic. Cultural products are defined according to the HS02 classification of creative goods provided by UNCTAD.

**Table 3 – Robustness Check: 2SLS**

Estimator	(1) HDFE IV (2SLS)	(2) HDFE IV (2SLS)
Dependent Var.	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$
$\ln(Xcult_{ni,t-1})$	0.057*** (4.77)	0.017** (2.66)
$\ln(Q_{in,t-1})$	0.591*** (11.87)	0.113*** (3.42)
$\ln(dist_{in})$	-0.521*** (-8.80)	
$Colony_{in}$	0.430*** (3.04)	
$Lang_{ni}$	0.421** (4.15)	
$Comleg_{in}$	0.126** (2.08)	
$S_{i,n}$		X
$S_{n,t}$	X	X
$S_{i,t}$	X	X
N	10369	10369

***First Stage Statistics***

<b>Underidentification Test</b>		
Kleibergen-Paap LM Stat, Chi-Sq(2)	2219.09	502.78
<b>Weak Identification Test</b>		
Cragg-Donald, Wald F Stat	38303.72	41744.97
Kleibergen-Paap Wald F Stat	2219.09	1755.24
<b>Weak Instrument-Robust Inference</b>		
Anderson-Rubin Wald Test, Chi-sq(2)	27.48	8.74
Stock-Wright LM Stat, Chi-sq(2)	26.79	8.62
<b>Over Identification Test</b>		
Hansen J Stat	0.646	0.535

*t* statistics in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors are clustered by country pair. The model includes the intercept.

The 2SLS estimates are obtained with the STATA command *reghdfe* provided by Sergio Correia which allows for the inclusion of high dimensional fixed effects. The instruments are the average bilateral tariffs in the manufacturing sector (values obtained from WITS World Bank data ) and the imputed value of tariff revenues of imported cultural products.

**Table 4 – Robustness Check: UNCTAD vs UNESCO Classification**

Estimator	(1) OLS	(2) OLS	(3) OLS
Classification	UNCTAD 2003-2013	UNESCO 2008-2013	UNESCO 2008-2013
	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$
$\ln(Xcult_{ni,t-1})$	0.072*** (6.56)	0.068*** (7.11)	
$\ln(\alpha_{ni,t-1})$			0.057*** (6.06)
$\ln(X_{ni,t-1})$			0.121*** (5.23)
$\ln(Q_{in,t-1})$	0.553*** (12.86)	0.574*** (13.20)	0.569*** (12.97)
$\ln(dist_{in})$	-0.489*** (-9.72)	-0.436*** (-8.90)	-0.382*** (-7.66)
Colony <sub>in</sub>	0.356*** (2.77)	0.184 (1.60)	0.165 (1.46)
Lang <sub>ni</sub>	0.399** (4.64)	0.354*** (4.54)	0.368*** (4.67)
Comleg <sub>in</sub>	0.091 (1.62)	0.036 (0.70)	0.078 (1.45)
$S_{n,t}$	X	X	X
$S_{i,t}$	X	X	X
$N$	15062	8315	8268
$R-sq$	0.90	0.90	0.90

$t$  statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Standard Errors are clustered by country pair. The model includes the intercept

**Table 5 – Extension: Impact of Cultural Exports on samples characterized by different values of Pre-Determined (time invariant) CULTURAL PROXIMITY**

Estimator	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS
Pre-determined Cultural Similarities	Linguistic	Linguistic	Linguistic	Linguistic	Genetic	Genetic
Source:	AP (2015)	AP (2015)	MT (2014)	MT (2014)	AP (2015)	AP (2015)
Class	0-50 <sup>th</sup>	51 <sup>st</sup> 100 <sup>h</sup>	0-50 <sup>th</sup>	51 <sup>st</sup> 100 <sup>h</sup>	0-50 <sup>th</sup>	51 <sup>st</sup> -100 <sup>th</sup>
$\ln(Xcult_{ni,t-1})$	0.007 (0.93)	0.024** (2.96)	0.008 (1.11)	0.022** (2.76)	0.007 (0.89)	0.017** (2.33)
$\ln(Q_{in,t-1})$	0.076** (2.32)	0.121** (3.61)	0.087** (2.43)	0.096** (2.80)	0.092*** (2.41)	0.103** (2.45)
$S_{i,n}$	X	X	X	X	X	X
$S_{n,t}$	X	X	X	X	X	X
$S_{i,t}$	X	X	X	X	X	X
$N$	6940	7176	6837	6965	7371	6831
$R-sq$	0.98	0.98	0.98	0.98	0.98	0.98

*t* statistics in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors are clustered by country pair. The model includes the intercept.

The model is estimated for different values of pre-determined cultural proximity based on linguistic distance. Samples are defined according to the median value of pre-determined linguistic (based on MaxPAll), and genetic distance (based on fst\_distance\_dominant) from Adsera Pytlikova (2015) and linguistic proximity (based on lp2) from Melitz and Toubal (2014): below the median (0-50<sup>th</sup>) and above the median (51<sup>st</sup> -100<sup>th</sup>), respectively. The median values are 92.06, 820 and 0.747948 for MaxPAll, fst\_distance\_dominant and lp2 respectively. The model is estimated with OLS and includes country-pair FEs. Cultural products are defined according to the HS02 classification of creative goods provided by UNCTAD



**Table 6 – Impact of “Cumulative” Cultural Exports on the Emigration Rate**

Estimator	(1) OLS	(2) OLS	(3) OLS
Dependent Var.	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$	$\ln(EM_{in,t})$
$\ln(\sum_{t-1}^{t-s} Xcult_{ni,t-1})$	0.073*** (5.11)	0.028** (2.45)	0.038** (2.40)
$\ln(X_{in,t-1})$	0.044*** (4.15)	-0.000 (-0.13)	-0.000 (-0.16)
$\ln(Q_{in,t-1})$	0.544*** (12.47)	0.093*** (3.24)	0.093*** (3.22)
$\ln(dist_{in})$	-0.450*** (-9.02)		
$Colony_{in}$	0.340*** (2.70)		
$Lang_{ni}$	0.409** (4.82)		
$Comleg_{in}$	0.065 (1.11)		

Cumulative Exports	$s = 5$	$s = 5$	$s = 9$
$S_{i,n}$		X	X
$S_{n,t}$	X	X	X
$S_{i,t}$	X	X	X
$N$	14909	14909	14909
$R-sq$	0.90	0.98	0.98

$t$  statistics in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors are clustered by country pair. The model includes the intercept.

The first column includes country\*year Fes; the second and the third columns the model includes also country pair FEs and all the covariates that are time invariant are automatically dropped. The estimates are obtained with the STATA command *reghdfe* provided by Sergio Correia which allows for the inclusion of high dimensional fixed effects. Exports are calculated as the cumulative bilateral inflows in the 5 years period between  $t-5$  and  $t-1$ . Trade flows are transformed from Current to 2010 Constant US Dollars using US 2010 Consumer Price Index. In the third column, exports are cumulated from  $t-9$  and  $t-1$ . The dependent variable in the OLS specification is the log of the bilateral emigration rate. Cultural products are defined according to the HS02 classification of creative goods provided by UNCTA

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# Appendix

## **A1–Link between Cultural Trade and Time Invariant proxies for Cultural Proximity**

In this Section, similarly to Felbermayr and Toubal (2010) and Guiso et al. (2009), we show that imports of cultural goods reflect time-invariant components of cultural similarities. We also argue that their time and within country-pair variance are strongly associated to the broad definition of cultural proximity proposed by sociologists (see Felbermayr and Toubal (2010)).

Table A1 shows pairwise correlation coefficients between Imports of Cultural goods and standard pre-determined measures of cultural similarities. Among these measures we include the log of weighted distance, a dummy for a common colonial past (CEPII) and measures of linguistic and genetic distance from Adserà and Pytliková (2015). In addition we compute correlations with measures of the size of networks (OECD) along with the religious distance and the composite Hofstede Index from Belot and Ederveen (2012). In particular, this composite Index has been one of the main workhorses for the empirical test of the impact of cultural affinity on economic exchanges such as trade and FDI (see for instance Du et al. (2012)), but other than being at the same time pre-determined and symmetric, has the drawback of covering a fairly limited sample. The correlation coefficient between both cultural imports measures and the conventional proxies of cultural and geographical proximity all have the right sign and are statistically different from zero.

Table A2 reports the results of a simple regression which closely resembles to the gravity models proposed by Disdier et al (2010) where trade in cultural goods is explained by time invariant measures of cultural similarities. Compared to Table A2 we also include imports of non-cultural goods among the explanatory variables. Interestingly, while all measures are strongly related to cultural imports in pairwise correlations, the regression analysis shows that religious and genetic distance as well as the size of the network does not matter for trade in cultural products. This might be due to the large impact of the Hofstede Index which plausibly captures much of the impact of other measures of cultural similarities. The results clearly indicate that Imports of cultural goods greatly depend on pre-determined components of cultural similarities.

**Table A1 – Coefficients of correlation between different measures of Cultural Proximity**

	$\ln(\text{ImpCultLevel}_{ni,t})$
$\ln\text{GeoDist}_{ni}$	<b>-0.499<sup>***</sup></b>
$\text{LangProx}_{ni}$	<b>0.357<sup>***</sup></b>
$\text{ReligionDist}_{ni}$	<b>-0.195<sup>***</sup></b>
$\ln(\text{ImmStock}_{in,t})$	<b>0.724<sup>***</sup></b>
$\text{Hofstede}_{in}$	<b>-0.245<sup>***</sup></b>
$\text{GeneticDist}_{ni}$	<b>-0.148<sup>***</sup></b>
$\text{Colony}_{ni}$	<b>0.165<sup>***</sup></b>

Number of Observations: 2210

<sup>\*\*\*</sup> denotes that coefficient is different from zero at 1% level of significance.

The pairwise correlations are between imports of cultural goods and geographical, linguistic and genetic distance, a dummy for common colonial past (CEPII). Among the proxies for cultural proximity we also included religious distance and the Hofstede Index from Belot and Ederveen (2012). Given the relatively small country coverage of the Religious Distance and the Hofstede Index database the sample is limited to 19 OECD countries.

**Table A2 – Explaining Trade in Cultural Goods**

Estimator	OLS
Dep. Variable	$\ln(\text{ImpCultLevel}_{ni,t})$
$\text{ImpNoCult}_{ni,t-1}$	<b>0.584***</b> (6.84)
$\ln\text{GeoDist}_{ni}$	<b>-0.659***</b> (-6.80)
$\text{LangProx}_{ni}$	<b>0.556***</b> (2.73)
$\text{ReligionDist}_{ni}$	-0.036 (-0.20)
$\ln(\text{ImmStock}_{in,t})$	0.051 (1.23)
$\text{Hofstede}_{in}$	<b>-0.733***</b> (-3.20)
$\text{GeneticDist}_{ni}$	-0.001 (-0.67)
$\text{Colony}_{ni}$	<b>0.342*</b> (1.82)
$S_{n,t}$	X
$S_{i,t}$	X
$N$	2210
$R\text{-}sq$	0.93

*t* statistics in parentheses

\*  $p < 0.05$

Standard Errors are clustered by country pair. The model includes the intercept and importer-year, as well as exporter-year fixed effects. The dependent variable is bilateral aggregate imports of cultural goods (BACI, CEPII) which is regressed on geographical, linguistic and genetic distance, and a dummy for common colonial past (CEPII). Among the covariates we included religious distance and the Hofstede Index from Belot and Ederveen (2012). Given the relatively small country coverage of the Religious Distance and the Hofstede Index database the sample is limited to 19 OECD countries.

### A3– Definition and Sources

**Table A3: Definition and sources of variables used in the empirical analysis**

Variable	Short description	Source
<b><u>Dependent variable</u></b>		
$\ln(\text{EMrate}_{in,t})$	Bilateral flows of emigrants over population of country of origin	OECD – International Migration Database (migrants) and World Bank (population)
<b><u>Explanatory variables</u></b>		
$\ln(\text{Xcult}_{ni,t-1})$	Cultural Trade flows in current US\$ from n to i at time t-1.	BACI, CEPII
$\ln(\alpha_{ni,t-1})$	Share of Cultural trade flows over total trade flows from n to I at time t-1.	BACI, CEPII
$\ln(\text{X}_{ni,t-1})$	Total Trade flows in current US\$ from n to i at time t-1	BACI, CEPII
$\ln(\text{X}_{in,t-1})$	Total Trade flows in current US\$ from n to I at time t-1.	BACI, CEPII
$\ln(\text{Q}_{in,t-1})$	Stock of migrants born in country n and resident in country i at time t-1	OECD – International Migration Database
$\ln(\text{dist}_{in})$	Weighted Distance (var: <i>distw</i> )	CEPII
$\text{Colony}_{in}$	Dummy =1 if country pair ever in a colonial relationship, 0 otherwise (var: <i>colony</i> )	CEPII
$\text{Lang}_{ni}$	Dummy =1 if country pair have the same language spoken by at least 9% of the population, 0 otherwise (var: <i>comlang_ethno</i> )	CEPII
$\text{Comleg}_{in}$	Dummy =1 if country pair have the same Common Legal Origin before transition (Comleg_Pretrans)	CEPII
$\ln(\text{GDPpc}_{n,t-1})$	GDP per capita at destination at t-1 expressed in PPP constant US\$ (2011 prices)	World Bank
<b><u>Instrumental Variables</u></b>		
$\text{Tariffs}_{ni,t}$	Average bilateral tariffs in the Manufacturing Sector (%)	WITS, World Bank
$\ln(\text{TarRev})_{ni,t}$	Imputed Tariff Revenues obtained applying average bilateral tariffs in the manufacturing to exports of cultural goods	WITS, World Bank, CEPII



**Proxies of time invariant**  
**CULTURAL PROXIMITY**  
**Used in Table 4**

<b><i>MaxPall</i></b>	Levenstein Linguistic Distance based on the Max Planck Institute set at the maximum proximity between two countries using any of their official and main languages.	Adsera Pytlikova (2015)
<b><i>Lp2</i></b>	Linguistic proximity measure based on the Ethnologue classification of language trees between trees, branches and sub-branches.	Melitz Toubal (2014)
<b><i>fst_distance_dominant</i></b>	Fst Genetic Distance, Weighted, Current Match	Adsera Pytlikova (2015)

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### A3 – UNCTAD vs UNESCO Classifications

A crucial issue for our analysis concerns the definition of what products can be considered as “cultural goods”. Two alternative classifications for cultural goods have been proposed by two different United Nations Organizations (UNESCO and UNCTAD), each of them based on slightly different criteria and different categories of goods to be included. As opposed to Disdier et al. (2010) – who classified cultural/creative goods according to the definition promoted by UNESCO – we rather adopt the scheme proposed by UNCTAD (2010). Our choice hinges on two main reasons: the first one - more substantial - concerns the countries’ selection; the second - more technical - is related to the different coding system adopted by the two classifications.

- Although the two frameworks apply different versions of HS codes, UNESCO and UNCTAD embrace some common underlying principles for capturing the exclusive creative/cultural goods. However, according to the data from UN CONTRADE database, the “*core*” categories provided by UNESCO are dominated by developed economies, whereas the “*optional*” domains more represented in the broader UNCTAD classification stand for the predominant share of cultural imports in the developing countries.<sup>21</sup> Since our analysis includes a very large number of developing and transition economies as countries of origin, we argue that UNCTAD classification is more adequate as it balances the cultural composition of trade flows by guaranteeing a relatively more comparable measure of cultural trade across countries at different development stages.
- The most recent and updated classification adopted by UNESCO is the 2007’s Harmonized Commodity Description and Coding System (HS 2007). The use of HS07 would imply a more limited time span as the first available year would be 2008, which would call for the adoption of conversion tables in order to extend the time coverage. One of the drawbacks of using conversion tables is that different levels of disaggregation across HS classifications may create distortions in the definition of “*cultural products*”. Conversely, UNCTAD (2010) adopts the HS02 coding system, which naturally allows for larger time series information. For the purpose of this paper the larger sample size is particularly important in terms of identification power given the important number of high dimensional fixed effects included in the specification, hence UNCTAD is preferred. In one of the extensions in Section 4.3 the cumulative exports are aggregated over 9 years, therefore conversion tables (HS92 to HS02) have been utilized.

Combining these two observations, the selection of cultural classification implies a trade-off between the cultural content embodied in these goods and the representation of developing countries as well as time coverage. To address this issue, we check the robustness of our results by employing the “*core*” UNESCO classification. The product codes in both classifications are outlined in the next Appendix A4.

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<sup>21</sup> For instance, the UNCTAD classification encompasses more product groups – namely *carpets, paperware, fashion, interior and toys* – and therefore more product codes (209). In comparison, the UNESCO classification emphasizes more – and puts more weight on – *Design and Art Crafts* categories, which encompass some three quarters of total creative product codes. We remind for a more detailed discussion to the reports UNCTAD (2010) and UNESCO (2013)

## A4 – Classifications of Cultural Products

**Table A4 – UNCTAD classification of Creative Goods**

Code	Label
<b>CER001</b>	<b>All Creatives Goods</b>
<b>CER002</b>	<b>Art Crafts</b>
<b>CER009</b>	<b>Carpets</b>
570110	Carpets and other textile floor coverings, of wool or fine animal hair, knotted, whether or not made-up
570190	Carpets and other textile floor coverings, of textile materials, knotted, whether or not made-up (excl. those of wool or fine animal hair)
570210	Kelem, Schumacks, Karamanie and similar handwoven rugs, whether or not made-up
570220	Floor coverings of coconut fibres "coir", woven, whether or not made-up
570231	Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, of pile construction, not made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570232	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flocked, of pile construction (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570239	Carpets and other floor coverings, of vegetable textile materials or coarse animal hair, woven, not tufted or flocked, of pile construction, not made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs, and floor coverings of coconut fibre...
570241	Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, of pile construction, made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs, plus Axminster and Wilton carpets)
570242	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flocked, of pile construction, made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570249	Carpets and other floor coverings, of vegetable textile materials or coarse animal hair, woven, not tufted or flocked, of pile construction, not made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs, and floor coverings of coconut fibre...
570251	Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, not of pile construction, not made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570252	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flocked, not of pile construction, not made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570259	Carpets and other floor coverings, of vegetable textile materials or coarse animal hair, woven, not tufted or flocked, not of pile construction, not made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs, and floor coverings of coconut f...
570291	Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, not of pile construction, made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570292	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flocked, not of pile construction, made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs)
570299	Carpets and other floor coverings, of vegetable textile materials or coarse animal hair, woven, not tufted or flocked, not of pile construction, made-up (excl. Kelem, Schumacks, Karamanie and similar handwoven rugs, and floor coverings of coconut fibre...
570330	Carpets and other floor coverings, of man-made textile materials, tufted "needle punched", whether or not made-up (excl. those of nylon or other polyamides)
<b>CER010</b>	<b>Celebration</b>
950510	Christmas articles (excl. candles and electric lighting sets, natural Christmas trees and Christmas tree stands)
950590	Festival, carnival or other entertainment articles, incl. conjuring tricks and novelty jokes, n.e.s.
950810	Travelling circuses and travelling menageries
<b>CER011</b>	<b>Other</b>

442090	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery, and similar articles, of wood; wooden articles of furniture (excl. statuettes and other ornaments; furniture, lighting fixtures and parts thereof)
670290	Artificial flowers, foliage and fruit and parts thereof, and articles made of artificial flowers, foliage or fruit, by binding, glueing, fitting into one another or similar methods (excl. of plastics)
701890	Glass eyes (excl. prosthetic articles); articles of glass beads, or of imitation pearls, imitation precious or semi-precious stones, statuettes and other ornaments of lamp-worked glass (excl. imitation jewellery)
960110	Worked ivory and articles of ivory, n.e.s.
960190	Worked bone, tortoise-shell, horn, antlers, coral, mother-of-pearl and other animal carving material, and articles of these materials, n.e.s. (excl. ivory)
960200	Worked vegetable or mineral carving material and articles of these materials n.e.s; moulded or carved articles of wax, of paraffin, of stearin, of natural gums or natural resins or of modelling pastes, and other moulded or carved articles n.e.s; worked...
<b>CER012</b>	<b>Paperware</b>
480210	Handmade paper and paperboard of any size or shape
<b>CER013</b>	<b>Wickerware</b>
460120	Mats, matting and screens of vegetable plaiting materials, flat-woven or bound together in parallel
460191	Plaits and similar products of plaiting materials, whether or not assembled into strips; plaiting materials, plaits and similar products of vegetable plaiting materials, flat-woven or bound together in parallel (excl. mats, matting and screens; wall co...
460199	Plaiting materials, plaits and similar products of non-vegetable plaiting materials, flat-woven or bound together in parallel (excl. wall coverings of heading 4814; parts of footwear or headgear)
460210	Basketwork, wickerwork and other articles, made directly to shape from plaiting materials or made-up from goods of heading 4601, and articles of loofah (excl. wall coverings of heading 4814; twine, cord and rope; footwear and headgear and parts thereof...
<b>CER014</b>	<b>Yarn</b>
580430	Hand-made lace in the piece, in strips or in motifs (excl. fabrics of heading 6002 to 6006)
580500	Hand-woven tapestries of the type Gobelin, Flanders, Aubusson, Beauvais and the like, and needle-worked tapestries, e.g. petit point, cross-stitch, whether or not made-up (excl. Kelem, Schumacks, Karamanie and the like, and tapestries > 100 years old)
580610	Narrow woven pile fabrics, incl. terry towelling and similar terry fabrics, and chenille fabrics (excl. labels, badges and similar articles)
580620	Narrow woven fabrics of textile materials, containing $\geq$ 5% elastomeric yarn or rubber thread by weight (excl. woven pile fabrics, incl. terry towelling and similar terry fabrics, chenille fabrics, and labels, badges and similar articles)
580631	Narrow woven fabrics of cotton, n.e.s.
580632	Narrow woven fabrics of man-made fibres, n.e.s.
580639	Narrow woven fabrics of textile materials other than cotton or man-made fibres, n.e.s.
580640	Narrow fabrics consisting of warp without weft assembled by means of an adhesive "bolducs"
580810	Braids in the piece
580890	Ornamental trimmings of textile materials, in the piece, not embroidered, other than knitted or crocheted; tassels, pompons and similar articles of textile materials (excl. braids in the piece)
580900	Woven fabrics of metal thread and woven fabrics of metallized yarn of heading 5605, of a kind used in apparel, as furnishing fabrics or for similar purposes, n.e.s.
581010	Embroidery on a textile fabric ground without visible ground, in the piece, in strips or in motifs
581091	Embroidery of cotton on a textile fabric ground, in the piece, in strips or in motifs (excl. embroidery without visible ground)
581092	Embroidery of man-made fibres on a textile fabric base, in the piece, in strips or in motifs (excl. embroidery without visible ground)
581099	Embroidery of materials other than cotton or man-made fibres, on a textile fabric base, in the piece, in strips or in motifs (excl. embroidery without visible ground)

581100	Quilted textile products in the piece, composed of one or more layers of textile materials assembled with padding by stitching or otherwise (excl. embroidery of heading 5810 and quilted fabrics for bedding and furnishings)
600240	Knitted or crocheted fabrics, of a width of $\leq 30$ cm, containing $\geq 5\%$ by weight elastomeric yarn (excl. containing rubber thread, pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabri...
600290	Knitted or crocheted fabrics, of a width of $\leq 30$ cm, containing $\geq 5\%$ by weight elastomeric yarn and rubber thread or rubber thread only (excl. pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or c...
600310	Knitted or crocheted fabrics of wool or fine animal hair, of a width of $\leq 30$ cm (excl. those containing by weight $\geq 5\%$ of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar article...
600320	Knitted or crocheted fabrics of cotton, of a width of $\leq 30$ cm (excl. those containing by weight $\geq 5\%$ of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or ...
600330	Knitted or crocheted fabrics of synthetic fibres, of a width of $\leq 30$ cm (excl. those containing by weight $\geq 5\%$ of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and k...
600340	Knitted or crocheted fabrics of artificial fibres, of a width of $\leq 30$ cm (excl. those containing by weight $\geq 5\%$ of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and ...
600390	Knitted or crocheted fabrics of a width of $\leq 30$ cm (excl. of cotton, artificial fibres, wool or fine animal hair, those containing by weight $\geq 5\%$ of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels,...
600410	Knitted or crocheted fabrics, of a width of $> 30$ cm, containing $\geq 5\%$ by weight elastomeric yarn (excl. containing rubber thread, pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabric...
600490	Knitted or crocheted fabrics, of a width of $> 30$ cm, containing $\geq 5\%$ by weight elastomeric yarn and rubber thread or rubber thread only (excl. pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or cr...
630232	Bed-linen of man-made fibres (excl. printed, knitted or crocheted)
630240	Table linen, knitted or crocheted
630411	Knitted or crocheted bedspreads (excl. bed-linen, quilts and eiderdowns)
630491	Articles for interior furnishing, knitted or crocheted (excl. blankets and travelling rugs, bed-linen, table linen, toilet linen, kitchen linen, curtains, incl. drapes, interior blinds, curtain or bed valances, bedspreads, lampshades and articles of he...
630800	Sets consisting of woven fabric and yarn, whether or not with accessories, for making up into rugs, tapestries, embroidered table cloths or serviettes, or similar textile articles, put up in packings for retail sale (excl. sets for making up into artic...
<b>CER003</b>	<b>Audio Visuals</b>
<b>CER015</b>	<b>Film</b>
370610	Cinematographic film, exposed and developed, whether or not incorporating sound track or consisting only of sound track, width $\geq 35$ mm
370690	Cinematographic film, exposed and developed, whether or not incorporating sound track or consisting only of sound track, width $< 35$ mm
<b>CER016</b>	<b>CD, DVD, Tapes</b>
852410	Gramophone records
852432	Discs, recorded, for laser reading systems, for reproducing sound only
852439	Discs, recorded, for laser reading systems, for reproducing sound and image or image only
852451	Magnetic tapes for reproducing sound or image, recorded, of a width $\leq 4$ mm
852452	Magnetic tapes for reproducing sound or image, recorded, of a width $> 4$ mm but $\leq 6,5$ mm
852453	Magnetic tapes for reproducing sound or image, recorded, of a width $> 6,5$ mm
<b>CER004</b>	<b>Design</b>

<b>CER017</b>	<b>Architecture</b>
490600	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; hand-written texts; photographic reproductions on sensitised paper and carbon copies of the foregoing
<b>CER018</b>	<b>Fashion</b>
420211	Trunks, suit-cases, vanity-cases, executive-cases, brief-cases, school satchels and similar containers, with outer surface of leather, composition leather or patent leather
420212	Trunks, suit-cases, vanity-cases, executive-cases, brief-cases, school satchels and similar containers, with outer surface of plastics or textile materials
420221	Handbags, whether or not with shoulder straps, incl. those without handles, with outer surface of leather, composition leather or patent leather
420222	Handbags, whether or not with shoulder straps, incl. those without handles, with outer surface of plastic sheeting or textile materials
420231	Wallets, purses, key-pouches, cigarette-cases, tobacco-pouches and similar articles carried in the pocket or handbag, with outer surface of leather, composition leather or patent leather
420232	Wallets, purses, key-pouches, cigarette-cases, tobacco-pouches and similar articles carried in the pocket or handbag, with outer surface of plastic sheeting or textile materials
420292	Travelling-bags, insulated food or beverage bags, toilet bags, rucksacks, shopping-bags, map-cases, tool bags, sports bags, jewellery boxes, cutlery cases, binocular cases, camera cases, musical instrument cases, gun cases, holsters and similar contain...
420310	Articles of apparel, of leather or composition leather (excl. clothing accessories, footwear and headgear and parts thereof, and goods of chapter 95, e.g. shin guards, fencing masks)
420329	Gloves, mittens and mitts, of leather or composition leather (excl. special sports gloves)
420330	Belts and bandoliers, of leather or composition leather
420340	Clothing accessories of leather or composition leather (excl. gloves, mittens and mitts, belts, bandoliers, footwear and headgear and parts thereof, and goods of chapter 95 [e.g. shin guards, fencing masks])
430310	Articles of apparel and clothing accessories of furskin (excl. gloves made of leather and furskin, footwear and headgear and parts thereof)
611710	Shawls, scarves, mufflers, mantillas, veils and the like, knitted or crocheted
611720	Ties, bow ties and cravats, knitted or crocheted
611780	Made up clothing accessories, knitted or crocheted, n.e.s. (excl. shawls, scarves, mufflers, mantillas, veils and the like, ties, bow ties and cravats)
611790	Parts of garments or clothing accessories, knitted or crocheted, n.e.s.
621410	Shawls, scarves, mufflers, mantillas, veils and similar articles of silk or silk waste (excl. knitted or crocheted)
621420	Shawls, scarves, mufflers, mantillas, veils and similar articles of wool or fine animal hair (excl. knitted or crocheted)
621430	Shawls, scarves, mufflers, mantillas, veils and similar articles of synthetic fibres (excl. knitted or crocheted)
621440	Shawls, scarves, mufflers, mantillas, veils and similar articles of artificial fibres (excl. knitted or crocheted)
621490	Shawls, scarves, mufflers, mantillas, veils and similar articles of textile materials (excl. of silk, silk waste, wool, fine animal hair or man-made fibres, knitted or crocheted)
621510	Ties, bow ties and cravats of silk or silk waste (excl. knitted or crocheted)
621520	Ties, bow ties and cravats of man-made fibres (excl. knitted or crocheted)
621590	Ties, bow ties and cravats of textile materials (excl. of silk, silk waste or man-made fibres, knitted or crocheted)
621710	Made up clothing accessories, of all types of textile materials, n.e.s. (excl. knitted or crocheted)
621790	Parts of garments or clothing accessories, of all types of textile materials, n.e.s. (excl. knitted or crocheted)
650300	Felt hats and other felt headgear, made from the hat bodies, hoods or plateaux of heading 6501, whether or not lined or trimmed (excl. made by assembling strips or pieces of felt, and toy and carnival headgear)
650400	Hats and other headgear, plaited or made by assembling strips of any material, whether or not lined or trimmed (excl. headgear for animals, and toy and carnival headgear)

650590	Hats and other headgear, knitted or crocheted, or made-up from lace, felt or other textile fabric, in the piece (but not in strips), whether or not lined or trimmed (excl. hair-nets, headgear for animals, and toy and fancy-dress headgear)
650692	Headgear of furskin, whether or not lined or trimmed (excl. toy and carnival headgear)
650699	Headgear, whether or not lined or trimmed, n.e.s.
900410	Sunglasses
<b>CER019</b>	<b>Glassware</b>
701310	Glassware of glass-ceramics, of a kind used for table, kitchen, toilet, office, indoor decoration or similar purposes (excl. goods of heading 7018, cooking hobs, leaded lights and the like, lighting fittings and parts thereof, atomizers for perfume and...
701321	Drinking glasses of lead crystal
701331	Glassware of lead crystal, of a kind used for table or kitchen purposes (excl. articles of heading 7018, drinking glasses, glass preserving jars "sterilizing jars", vacuum flasks and other vacuum vessels)
701332	Glassware for table or kitchen purposes of glass having a linear coefficient of expansion $\leq 5 \times 10^{-6}$ per kelvin within a temperature range of 0°C to 300°C (excl. glassware of glass-ceramics or lead crystal, articles of heading 7018, drinking glasses,...)
701391	Glassware, of lead crystal, of a kind used for toilet, office, indoor decoration or similar purposes (excl. glassware of a kind used for table or kitchen purposes, glassware of glass-ceramics or lead crystal, articles of heading 7018, mirrors, leaded l...
<b>CER020</b>	<b>Interior</b>
441900	Tableware and kitchenware, of wood (excl. interior fittings, ornaments, cooperage products, tableware and kitchenware components of wood, brushes, brooms and hand sieves)
481420	Wallpaper and similar wall coverings of paper, consisting of paper coated or covered, on the face side, with a grained, embossed, coloured or design-printed or otherwise decorated layer of plastics
481430	Wallpaper and similar wall coverings of paper, consisting of paper covered, on the face side, with plaiting material, whether or not bound together in parallel strands or woven
570310	Carpets and other floor coverings, of wool or fine animal hair, tufted "needle punched", whether or not made-up
570390	Carpet tiles of vegetable textile materials or coarse animal hair, tufted "needle punched", whether or not made-up
570410	Floor tiles, of felt, not tufted or flocked, with an area of $\leq 0,3 \text{ m}^2$
570500	Carpets and other textile floor coverings, whether or not made-up (excl. knotted, woven or tufted "needle punched", and of felt)
580410	Tulles and other net fabrics (excl. woven, knitted or crocheted fabrics)
580421	Mechanically made lace of man-made fibres in the piece, in strips or in motifs (excl. fabrics of heading 6002 to 6006)
580429	Mechanically made lace in the piece, in strips or in motifs (excl. that of man-made fibres and fabrics of heading 6002 to 6006)
590500	Textile wall coverings
691110	Tableware and kitchenware, of porcelain or china (excl. ornamental articles, pots, jars, carboys and similar receptacles for the conveyance or packing of goods, and coffee grinders and spice mills with receptacles made of ceramics and working parts of ...)
691200	Tableware, kitchenware, other household articles and toilet articles, of ceramics other than porcelain or china (excl. baths, bidets, sinks and similar sanitary fixtures, statuettes and other ornamental articles, pots, jars, carboys and similar recepta...
691410	Ceramic articles of porcelain or china, n.e.s.
821510	Sets of spoons, forks or other articles of heading 8215, which may also contain up to an equivalent number of knives, of base metal, containing at least one article plated with precious metal
821520	Sets of spoons, forks or other articles of heading 8215, incl. those with up to an equal number of knives, of base metal, containing no articles plated with precious metal
821591	Spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter-knives, sugar tongs and similar kitchen or tableware of base metal, plated with precious metal (excl. sets of articles such as lobster cutters and poultry shears)
940320	Metal furniture (excl. for offices, seats and medical, surgical, dental or veterinary furniture)

940340	Wooden furniture for kitchens (excl. seats)
940350	Wooden furniture for bedrooms (excl. seats)
940360	Wooden furniture (excl. for offices, kitchens and bedrooms, and seats)
940380	Furniture of cane, osier, bamboo or similar materials (excl. of metal, wood and plastics)
940510	Chandeliers and other electric ceiling or wall lighting fittings (excl. for lighting public open spaces or thoroughfares)
940530	Electric lighting sets of a kind used for Christmas trees
<b>CER021</b>	<b>Jewellery</b>
711311	Articles of jewellery and parts thereof, of silver, whether or not plated or clad with other precious metal (excl. articles > 100 years old)
711319	Articles of jewellery and parts thereof, of precious metal other than silver, whether or not plated or clad with precious metal (excl. articles > 100 years old)
711320	Articles of jewellery and parts thereof, of base metal clad with precious metal (excl. articles > 100 years old)
711411	Articles of goldsmiths' or silversmiths' wares or parts thereof, of silver, whether or not plated or clad with other precious metal (excl. jewellery, watch-and clockmakers' wares, musical instruments, weapons, perfume atomizers and heads for these, ori...
711419	Articles of goldsmiths' or silversmiths' wares or parts thereof, of precious metal other than silver, whether or not plated or clad with precious metal (excl. jewellery, watch- and clockmakers' wares, musical instruments, weapons, perfume atomizers and...
711420	Articles of goldsmiths' or silversmiths' wares and parts thereof, of base metal clad with precious metal (excl. jewellery, watch-and clockmakers' wares, musical instruments, weapons, perfume atomizers and heads for these, original sculptures or statuar...
711610	Articles of natural or cultured pearls, n.e.s.
711620	Articles of precious or semi-precious stones "natural, synthetic or reconstructed", n.e.s.
711711	Cuff-links and studs, of base metal, whether or not clad with silver, gold or platinum
711719	Imitation jewellery, of base metal, whether or not plated with precious metal (excl. cuff-links and studs)
<b>CER022</b>	<b>Toys</b>
950100	Wheeled toys designed to be ridden by children, e.g. tricycles, scooters, pedal cars (excl. normal bicycles with ball bearings); dolls' carriages
950210	Dolls representing only human beings, whether or not clothed
950291	Garments and accessories, footwear and headgear for dolls representing only human beings
950299	Parts and accessories for dolls representing only human beings, n.e.s.
950310	Electric trains, incl. tracks, signals and other accessories therefor
950320	Scale model assembly kits, whether or not working models (excl. electric trains, incl. tracks, signals and other accessories therefor)
950330	Construction sets and constructional toys (excl. scale model assembly kits)
950341	Stuffed toys representing animals or non-human creatures
950349	Toys representing animals or non-human creatures (excl. stuffed)
950350	Toy musical instruments and apparatus
950360	Puzzles
950370	Toys, put up in sets or outfits (excl. electric trains, incl. accessories, scale model assembly kits, construction sets and constructional toys, and puzzles)
950380	Toys and models, incorporating a motor (excl. electric trains, scale model assembly kits, and toys representing animals, human or non-human creatures)
950390	Toys, n.e.s.
950420	Billiards and accessories



950440	Playing cards
950490	Tables for casino games, automatic bowling alley equipment, and other funfair, table or parlour games, incl. pintables (excl. operated by coins, banknotes "paper currency", discs or other similar articles, billiards, video games for use with a televisi...
<b>CER005</b>	<b>New Media</b>
<b>CER023</b>	<b>Recorded Media</b>
852460	Cards incorporating a recorded magnetic stripe
852499	Recorded media for sound or image reproducing phenomena, incl. matrices and masters for the production of records (excl. gramophone records, discs for laser reading systems, magnetic tapes, cards incorporating a magnetic stripe and goods of chapter 37)
854381	Proximity cards and tags, generally consisting of an integrated circuit with a read only memory attached to a printed antenna
<b>CER024</b>	<b>Video Games</b>
950410	Video games for use with a television receiver
950430	Games with screens, flipper and other games, operated by coins, banknotes "paper currency", discs or other similar articles (excl. bowling alley equipment)
<b>CER006</b>	<b>Performing Arts</b>
<b>CER025</b>	<b>Musical Instruments</b>
830610	Bells, gongs and the like, non-electric, of base metal (excl. musical instruments)
920110	Upright pianos
920120	Grand pianos
920190	Harpsichords and other keyboard stringed instruments (excl. pianos)
920210	Violins and other string instruments
920290	Guitars, harps and other string musical instruments (excl. with keyboard and those played with a bow)
920510	Brass-wind instruments
920590	Wind musical instruments (excl. organs and brass-wind instruments)
920600	Percussion musical instruments, e.g. drums, xylophones, cymbals, castanets, maracas
920710	Keyboard instruments, the sound of which is produced, or must be amplified, electrically (excl. accordions)
920790	Accordions and musical instruments without keyboards, the sound of which is produced, or must be amplified, electrically
920810	Musical boxes
920890	Fairground organs, mechanical street organs, mechanical singing birds, musical saws and other musical instruments not falling within any other heading in chapter 92; decoy calls of all kinds; whistles, call horns and other mouth-blown sound signalling ...
<b>CER026</b>	<b>Printed Music</b>
490400	Music, printed or in manuscript, whether or not bound or illustrated
<b>CER007</b>	<b>Publishing</b>
<b>CER027</b>	<b>Books</b>
490110	Printed books, brochures and similar printed matter, in single sheets, whether or not folded (excl. periodicals and publications which are essentially devoted to advertising)
490191	Dictionaries and encyclopaedias, and serial instalments thereof
490199	Printed books, brochures and similar printed matter (excl. those in single sheets; dictionaries, encyclopaedias, periodicals and publications which are essentially devoted to advertising)
490300	Children's picture, drawing or colouring books
<b>CER028</b>	<b>Newspaper</b>

480100	Newsprint, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state
490210	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material, appearing at least four times a week
490290	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material (excl. those appearing at least four times a week)
<b>CER029</b>	<b>Other Printed Matter</b>
490510	Globes, printed (excl. relief globes)
490591	Maps and hydrographic or similar charts of all kinds, incl. atlases and topographical plans, printed and in book form (excl. globes, and maps and plans, in relief)
490599	Maps and hydrographic or similar charts of all kinds, incl. atlases, wall maps and topographical plans, printed (excl. those in book form, and maps, plans and globes, in relief)
490810	Transfers "decalcomanias", vitrifiable
490890	Transfers "decalcomanias" (excl. vitrifiable)
490900	Printed or illustrated postcards; printed cards bearing personal greetings, messages or announcements, whether or not illustrated, with or without envelopes or trimmings
491000	Calendars of any kinds, printed, incl. calendars blocks
491110	Trade advertising material, commercial catalogues and the like
<b>CER008</b>	<b>Visual Arts</b>
<b>CER030</b>	<b>Antiques</b>
970400	Postage or revenue stamps, stamp-postmarks, first-day covers, postal stationery, stamped paper and the like, used, or if unused, not of current or new issue in which they have, or will have, a recognised face value
970500	Collections and collector's pieces of zoological, botanical, mineralogical, anatomical, historical, archaeological, palaeontological, ethnographic or numismatic interest
970600	Antiques of > 100 years old
<b>CER031</b>	<b>Paintings</b>
970110	Paintings, e.g. oil paintings, watercolours and pastels, and drawings executed entirely by hand (excl. technical drawings and the like of heading 4906, and hand-painted or hand-decorated manufactured articles)
970190	Collages and similar decorative plaques
970200	Original engravings, prints and lithographs
<b>CER032</b>	<b>Photography</b>
370510	Photographic plates and film, exposed and developed, for offset reproduction (excl. products made of paper, paperboard or textiles and ready-to-use plates)
370520	Microfilm, exposed and developed (excl. microfilm for offset reproduction)
370590	Photographic plates and film, exposed and developed (excl. products made of paper, paperboard or textiles, cinematographic film, film for offset reproduction and microfilm)
491191	Pictures, prints and photographs, n.e.s.
<b>CER033</b>	<b>Sculpture</b>
392640	Statuettes and other ornamental articles, of plastics
442010	Statuettes and other ornaments, of wood (excl. wood marquetry and inlaid wood)
691310	Statuettes and other ornamental articles of porcelain or china, n.e.s.
691390	Statuettes and other ornamental ceramic articles, n.e.s. (excl. of porcelain or china)
830621	Statuettes and other ornaments, of base metal, plated with precious metal (excl. works of art, collectors' pieces and antiques)
830629	Statuettes and other ornaments, of base metal, not plated with precious metal (excl. works of art, collectors' pieces and antiques)

970300	Original sculptures and statuary, in any material
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*Note:* In bold the Groups (from CER001 to CER008) and the Subgroups (from CER001 to CER033) defined by UNCTAD.

**Table A5 – UNESCO Classification of Core Cultural Goods**

<b>HS07</b>	<b>Description</b>	<b>Domain</b>	<b>Macro Category</b>
970600	Antiques of an age exceeding one hundred years	Antiques	Cultural and Natural Heritage
970500	Collections and collectors' pieces of zoological, botanical, mineralogical, anatomical, historical, archaeological, palaeontological, ethnographic or numismatic interest	Antiques	Cultural and Natural Heritage
830610	Bells, gongs and the like	Musical Instruments	B. Performance and Celebration
920110	Upright pianos	Musical Instruments	B. Performance and Celebration
920120	Grand pianos	Musical instruments	B. Performance and Celebration
920190	Harpsichords and other keyboard stringed instruments (excl. pianos)	Musical instruments	B. Performance and Celebration
920210	Other string musical instruments (for example violins, harps) played with a bow	Musical instruments	B. Performance and Celebration
920290	Guitars, harps and other string musical instruments (excl. with keyboard and those played with a bow)	Musical instruments	B. Performance and Celebration
920510	Brass wind instruments (for example, clarinets, trumpets bagpipes)	Musical instruments	B. Performance and Celebration
920590	Wind musical instruments (excl. brass-wind instruments)	Musical instruments	B. Performance and Celebration
920600	Percussion musical instruments (for example drums, xylophones, cymbals, castanets, maracas)	Musical instruments	B. Performance and Celebration
920710	Keyboard instruments other than accordions	Musical instruments	B. Performance and Celebration
920790	Accordions and musical instruments without keyboards, the sound of which is produced, or must be amplified, electrically	Musical instruments	B. Performance and Celebration
920810	Musical boxes	Musical instruments	B. Performance and Celebration
920890	Fairground organs, mechanical street organs, mechanical singing birds, musical saws and other musical instrument; decoy calls of all kinds; whistles, call horn and other mouth blown sound signalling instruments	Musical instruments	B. Performance and Celebration
852321	Cards incorporating a magnetic stripe	Recorded media	B. Performance and Celebration
852329	Magnetic media for the recording of sound or of other phenomena (excl. cards incorporating a magnetic stripe and goods of chapter 37)	Recorded media	B. Performance and Celebration
852351	Solid-state non-volatile storage devices	Recorded media	B. Performance and Celebration
852359	Semiconductor media, unrecorded, for the recording of sound or of other phenomena	Recorded media	B. Performance and Celebration
852380	Gramophone records and other media for the recording of sound or of other phenomena, whether or not recorded, incl. matrices and masters for the production of discs	Recorded media	B. Performance and Celebration
490400	Music, printed or in manuscript, whether or not bound or illustrated	Recorded media	B. Performance and Celebration
970110	Paintings, drawings and pastels, executed entirely by hand, other than drawings of heading 4906 and other than hand-painted or hand-decorated manufactured articles, collages and similar decorative plaques	Paintings	C. Visual Arts and Crafts
970190	Collages and similar decorative plaques	Paintings	C. Visual Arts and Crafts
491191	Pictures, designs and photographs	Paintings	C. Visual Arts and Crafts
970200	Original engravings, prints and lithographs	Other visual arts	C. Visual Arts and Crafts
970300	Original sculptures and statuary, in any material	Other visual arts	C. Visual Arts and Crafts

392640	Statuettes and other ornamental articles in plastic	Other visual arts	C. Visual Arts and Crafts
442010	Statuettes and other ornaments, of wood	Other visual arts	C. Visual Arts and Crafts
442090	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery, and similar articles, of wood; wooden articles of furniture	Other visual arts	C. Visual Arts and Crafts
691310	Statuettes and other ornamental ceramic articles of porcelain or China	Other visual arts	C. Visual Arts and Crafts
691390	Statuettes and other ornamental ceramic articles, n.e.s. (excl. of porcelain or china)	Other visual arts	C. Visual Arts and Crafts
701890	Glassware articles including statuettes	Other visual arts	C. Visual Arts and Crafts
830621	Statuettes and other ornaments, of base metal plated with precious metal	Other visual arts	C. Visual Arts and Crafts
830629	Statuettes and other ornaments, of base metal, not plated with precious metal (excl. works of art, collectors' pieces and antiques)	Other visual arts	C. Visual Arts and Crafts
960110	Worked ivory and ivory articles	Other visual arts	C. Visual Arts and Crafts
960190	Bone, tortoiseshell, horn, antlers, coral, mother-of-pearl and other animal carving material, and articles of these materials (including articles obtained by moulding)	Other visual arts	C. Visual Arts and Crafts
580500	Hand-woven tapestries of the type Gobelins, Flanders, Aubusson, Beauvais and the like and needle-worked tapestries	Craft	C. Visual Arts and Crafts
580610	Narrow woven fabrics: Woven pile fabrics (including terry towelling and similar terry fabrics) and chenille fabrics	Craft	C. Visual Arts and Crafts
580620	Narrow woven fabrics: Other woven fabrics, containing by weight 5% or more of lastomeric yarn or rubber thread	Craft	C. Visual Arts and Crafts
580631	Narrow woven fabrics: Other woven fabrics of cotton	Craft	C. Visual Arts and Crafts
580632	Narrow woven fabrics: Other woven fabrics of man-made fibres	Craft	C. Visual Arts and Crafts
580639	Narrow woven fabrics: Other woven fabrics of other textile materials	Craft	C. Visual Arts and Crafts
580640	Fabrics consisting of warp without weft assembled by means of and adhesive (bolducs)	Craft	C. Visual Arts and Crafts
580810	Braids in the piece; ornamental trimmings in the piece, without embroidery; other than knitted or crocheted	Craft	C. Visual Arts and Crafts
580890	Other braids in the piece; ornamental trimmings in the piece, without embroidery; other than knitted or crocheted	Craft	C. Visual Arts and Crafts
580900	Woven fabrics of metal thread and woven fabrics of metallised yarn of heading 5605 of a kind used in apparels as furnishing fabrics or for similar purposes	Craft	C. Visual Arts and Crafts
581010	Embroidery in the piece, in strips or in motifs without visible ground	Craft	C. Visual Arts and Crafts
581091	Embroidery in the piece, in strips or in motifs: Other embroidery of cotton	Craft	C. Visual Arts and Crafts
581092	Embroidery in the piece, in strips or in motifs: Other embroidery of man-made fibres	Craft	C. Visual Arts and Crafts
581099	Embroidery in the piece, in strips or in motifs: Other embroidery of other textile materials	Craft	C. Visual Arts and Crafts
581100	Quilted textile products in the piece	Craft	C. Visual Arts and Crafts
600240	Knitted or crocheted fabrics of a width not exceeding 30 cm, containing by weight 5% or more of lastomeric yarn but not containing robber thread	Craft	C. Visual Arts and Crafts
600290	Other knitted or crocheted fabrics of a width not exceeding 30 cm, containing by weight 5% or more of lastomeric yarn or robber thread	Craft	C. Visual Arts and Crafts
600310	Knitted or crocheted fabrics of a width not exceeding 30 cm of wool or fine animal hair	Craft	C. Visual Arts and Crafts
600320	Knitted or crocheted fabrics of a width not exceeding 30 cm of cotton	Craft	C. Visual Arts and Crafts
600330	Knitted or crocheted fabrics of a width not exceeding 30 cm of synthetic fibres	Craft	C. Visual Arts and Crafts
600340	Knitted or crocheted fabrics of a width not exceeding 30 cm of artificial fibres	Craft	C. Visual Arts and Crafts
600390	Other knitted or crocheted fabrics of a width not exceeding 30 cm	Craft	C. Visual Arts and Crafts

600410	Knitted or crocheted fabrics, of a width exceeding 30 cm containing by weight 5% or more of lastomeric yarn but not containing robber thread	Craft	C. Visual Arts and Crafts
600490	Other knitted or crocheted fabrics, of a width exceeding 30 cm containing by weight 5% or more of lastomeric yarn or robber thread	Craft	C. Visual Arts and Crafts
711311	Articles of jewellery and parts thereof of silver, whether or not plated or clad with other precious metal	Jewellery	C. Visual Arts and Crafts
711319	Articles of jewellery and parts thereof of other precious metal, whether or not plated or clad with precious metal	Jewellery	C. Visual Arts and Crafts
711320	Articles of jewellery and parts thereof of base metal clad with precious metal	Jewellery	C. Visual Arts and Crafts
711411	Articles of goldsmiths' or silversmiths' wares and parts thereof of silver, whether or not plated or clad with other precious metal	Jewellery	C. Visual Arts and Crafts
711419	Articles of goldsmiths' or silversmiths' wares and parts thereof of other precious metal, whether or not plated or clad with precious metal	Jewellery	C. Visual Arts and Crafts
711420	Articles of goldsmiths' or silversmiths' wares and parts thereof of base metal clad with precious metal	Jewellery	C. Visual Arts and Crafts
711610	Articles of natural or cultured pearls Jewellery	Jewellery	C. Visual Arts and Crafts
711620	Articles of precious or semi-precious stones (natural, synthetic or reconstructed)	Jewellery	C. Visual Arts and Crafts
370510	Photographic plates and film, exposed and developed, other than cinematographic film for offset reproduction	Photography	C. Visual Arts and Crafts
370590	Photographic plates and film, exposed and developed (excl for offset production)	Photography	C. Visual Arts and Crafts
490110	Printed reading books, brochures, leaflets and similar printed matter whether in single sheets whether or not folded	Books	D. Books and Press
490191	Dictionaries and encyclopaedias and serial instalments thereof	Books	D. Books and Press
490199	Printed books, brochures and similar printed matter	Books	D. Books and Press
490210	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material appearing at least four times a week	Newspaper	D. Books and Press
490290	Other newspapers, journals and periodicals	Newspaper	D. Books and Press
490300	Children's picture, drawing or colouring books	Other Printed Matter	D. Books and Press
490591	Maps and hydrographical or similar charts of all kinds in book form	Other Printed Matter	D. Books and Press
490510	Maps and hydrographical or similar charts of all kinds in globes	Other Printed Matter	D. Books and Press
490599	Other maps and hydrographical or similar charts of all kinds	Other Printed Matter	D. Books and Press
490900	Postcards, printed or illustrated; printed greeting cards	Other Printed Matter	D. Books and Press
491000	Calendars of any kind, printed, including calendar blocks	Other Printed Matter	D. Books and Press
370610	Cinematograph film, exposed and developed whether or not incorporating sound track or only consisting of sound track of a width of 35 mm or more	Film and Video	E. Audio-visual and Interactive Media
370690	Cinematographic film, exposed and developed, whether or not incorporating soundtrack or consisting only of soundtrack, width < 35 mm	Film and Video	E. Audio-visual and Interactive Media
950410	Video games used with a television receiver	Film and Video	E. Audio-visual and Interactive Media
490600	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; hand-written texts; photographic reproductions on sensitised paper and carbon copies of the foregoing	Architecture and design	F. Design and Creative Services