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Breaking the ties that bind: Metropolitan dependence and export growth in the poor periphery, 1950-90



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A R T I C L E I N F O A B S T R A C T JEL Codes: Decolonisation was one of the most important institutional transformations of the twentieth century. Recent

F14 work on the effect of decolonisation on bilateral trade has suggested that trade with the ex-metropolis declined F54 significantly after independence. Due to problems related to data quality and coverage, however, there is still no N70 consensus on whether the reduction of colonial dependence encouraged or impeded export growth. In this paper, Keywords: we argue that metropolitan trade shares proxy for colonial monopsony. Using a new database of exports at Decolonisation constant prices for 131 countries and mean group estimators that control for a range of confounding factors, we Monopsony find that trade shares with the metropole are negatively associated with export growth, with important differ-Colonial trade ences across metropolitan nationalities and locations. We argue that the significance of the erosion of colonial Export growth trade ties for export growth following independence was contingent on the interaction of policy and location Africa Geography during the colonial period.

1. Introduction

Among the most important institutional changes of the post-war era was the dismantling of the European Empires in Africa, Asia, and the Americas. During the post-war period to the end of the millennium, 66 countries and just under half of the world's population lived through a decolonisation event. The end of Empire wrought sweeping changes in political regimes, international relations and, in some cases, the onset of harrowing civil war and ethnic violence. It also brought with it increased integration into international commodity markets. The voluminous literature on the historically persistent effects of colonial institutions, particularly those governing property rights and factor markets, has shown that the nature of institutions developed during colonisation weigh heavily on postcolonial outcomes (Nunn 2009). The same is true for trade (Gokmen et al., 2020; Berthou and Ehrhart, 2017). One corollary of this body of evidence is that decolonisation, whether occurring in the nineteenth or twentieth centuries, failed to usher in the institutional changes necessary to break with the past. This is supported by a growing body of research on the immediate and long-term political and economic effects of independence, the findings of which are, at best,

ambiguous. The effect of independence on economic growth and the quality of political institutions is either null (Lee and Paine, 2019) or profoundly negative (Alam, 1994; Collier and Gunning, 1999). Most studies suffer from an inherent sample selection bias, however, as they do not conduct placebo tests on non-decolonised or independent countries (Sylwester, 2005).

Given the open nature of many decolonised countries, the performance of the export economy following independence was fundamental for economic, political, and social stability. Monopsony was a common characteristic of the colonial trade, the result being that many countries' exports were heavily concentrated in metropolitan markets. A prime indication of decolonisation was thus the reduction of the metropolitan trade share. Descriptive work on the geographical concentration of exports during the post-war period showed that high levels of concentration were a general characteristic of peripheral countries, regardless of their political status (Michealy, 1958; Love, 1979). The metropolitan share of colonial exports was high around the time of independence and differed depending on metropole nationality (Kleiman, 1976). Hirschman's (1945: 114-115) work on the British Empire before World War Two showed declining shares interrupted by the Great Depression,

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whereby concentration increased until 1938. Kleiman (1976: 467) extended these figures to the 1960s on the metropolitan import side and included France, Belgium, and Portugal, finding that this trend continued until at least the mid-1950s. Following the wave of independence in the late-1950s and early-1960s, trade with the ex-metropolis declined and trading partner diversification initially occurred with increased exports mainly to the socialist countries, West Germany, Italy, and Japan (Kleiman, 1977).

Recent work using the gravity model and bilateral trade data for the post-war period has established that there was a reduction in trade between the former colony and metropole following independence. Two studies (Head et al., 2010; Lavallée and Lochard, 2015), using similar gravity specifications over the same period (1948-2006/7), coincide in the finding that trade between the former colony and metropole declined considerably, in the half-century or so following independence, by between 46 and 65 per cent. These studies, however, differ on the overall effect of independence on trade. Head et al. (2010) find that independence also reduced trade with "siblings" (other countries in the colonial trading network) by around the same amount as that of the metropole, and with the rest of the world by around 20 per cent. Thus, "countries that become independent on average trade less with all countries" (Head et al., 2010: 11, emphasis in original). Lavallée and Lochard (2015) find that while exports to the metropole declined following independence, trade with the rest of the world increased by 252 per cent. Furthermore, segmentation by metropole nationality reveals a considerable degree of heterogeneity of effect; the colonial erosion effect was largely driven by the disintegration of the French colonial empire (Lavallée and Lochard, 2015, 2019). Independence diverted exports from the French metropole and "siblings" to the rest of the world, while the effect was weaker for the British colonies, and undetected for other metropole nationalities.

It is likely that the contradictory nature of these results is related to the data. The quality and coverage of the IMF Direction of Trade Statistics (DOTS), the principal source of bilateral trade statistics, are seriously problematic for the period prior to independence for many countries.¹ Given the limitations imposed by the bilateral data, in this paper we take a different approach. Unlike the gravity literature, which explores bilateral trade relations using flawed data, we focus directly on the effect of decolonisation on export growth by assembling a novel database of total exports at constant prices for 131 countries, 55 of which experienced a decolonisation event during the period 1950-90. Our decolonised sample includes countries from all continents but Oceania, and French, British, Belgian, Italian, Portuguese, and Dutch metropolitan powers. As part of this process, we construct new trade deflators for 67 (mostly poor) countries, using a database of international prices, adjusted for trade costs, and yearly trade weights. We address the ambiguities of the literature head-on by regressing exports on the most manifest indicator of colonial dependence: the metropolitan share of total exports. Our empirical specification involves explicitly controlling for potential sources of bias typically present in panel data sets of this size (moderate N and T), using mean group estimators to address issues of non-stationarity and cross-sectional dependence, as well as standard fixed effect controls for unobserved time variant and invariant factors.

For our sample of decolonised countries, the metropolitan share of

total exports is negatively associated with export growth. This effect is particularly strong for the French African colonies following their political independence. In the British case, the results suggest that the reduction of the metropolitan presence in exports was already driving export growth before independence. These findings support longstanding stylised narratives of European imperial policy: French 'enforced bilateralism,' particularly in Africa, was harsher than that of liberal Britain, the product of an especially restrictive preferential system (Kleiman, 1976; Lavallée and Lochard, 2015). Additionally, we find that a) the relationship between the metropolitan share and export growth is not significant when concentration is measured with respect to all countries, and b) regressions using an expanded sample of 86 countries show that this effect was only present in the countries that decolonised during the period 1950-90. These results confirm that the metropole effect does not merely reflect a) high trade shares derived from forces other than colonial monopsony or b) generalised trends across the (colonised and independent) poor periphery. We also investigate the influence of geography and colony-type, particularly location relative to the Atlantic, the historical nucleus of globalisation, and whether a colony was a settler or peasant export economy. While decolonised countries with and without access to the Atlantic Ocean and settler and peasant economies evinced comparable levels and trends of concentration, the metropole effect is only significant for the Atlantic countries, and larger for the peasant economies. We interpret this an as interaction between policy and geography: political independence provided (imperfect) opportunities for the geographical diversification of exports, but location determined the country composition of this diversification.

The structure of the paper is as follows. In the next section, we present our new database of exports at constant prices for 131 countries and examine trends in export growth. We then outline a simple model of exports under monopsony and link this to trends in our chosen indicator: the metropolitan share of exports. Section four presents our baseline regression results together with a series of robustness checks. Section five examines the influence of location and colony-type and briefly describes trends in the geographical diversification of the exports of the decolonised countries. Section six concludes.

2. Decolonisation and export growth during the 20TH century

2.1. Series construction and sample

At the heart of our empirical analysis is a new database consisting of exports at constant prices for 131 countries during the period 1950-90. The departure point of the series is the United Nations' compilation of exports at current prices by country for the period 1948 onwards (UNCTAD-STAT). The coverage of the current price series begins with 144 countries in 1948, increases to 168 in 1950, and peaks at 219 in 2020. This gradual increase in the coverage reflects not only the appearance of new countries (especially following the dissolution of the Soviet Union) but also the inclusion of smaller countries that did not report their statistics at the beginning of the period. Importantly, for the purpose of this paper, the data includes the total exports of many individual countries before their political independence, presumably reported to the United Nations by the metropolitan government. To maximise the geographical- and temporal-coverage of our sample, we use 1950 as the starting point for our compilation of exports at constant prices. Our end point - 1990 - is chosen for two reasons: because it excludes the fall of the Soviet Union and subsequent increase of polity units for which no pre-USSR current price data is given in UNCTAD-STAT, and because this period encompasses virtually all the major independence events of the post-war period (USSR aside- see Fig. 1).

Fally (2015) showed that price indices can be recovered from a structural gravity model. However, this would require complete bilateral trade data coverage of every country in our sample from 1948, which, as mentioned, is currently not publicly available. Thus, we must

¹ The digitised DOTS, in most cases, begins in 1960, which seriously reduces or removes the pre-independence window. What's more, 46 per cent of the series for our decolonised sample contain missing years, and the geographical distribution is apparently incomplete for some countries in certain years (see Table 2). The coverage problem of the DOTS was partially remedied by Lavallée and Lochard (2015) by adding extra data from additional primary sources. These sources, however, aggregated many French African countries by customs area prior to independence, meaning a loss of important variation at the country-level.



■ Total independence events ☑ Total sample

Fig. 1. Total independence events by year and in our sample, 1945-2000. Note: this figure includes a count of the number of countries that experienced an independence event in each year, as well as the number of these countries in our sample. Sources: based on country list in Head, Mayer and Ries 2010: 13.

take a more data intensive approach to assembling the trade deflators. As a first step, we gather the export price indices previously published in the United Nations sources. This includes indices for 139 countries beginning in 1980 from the UNCTAD-STAT. We extend these backwards using the available series from the Yearbook of International Trade Statistics and COMTRADE, with additional indices for Latin America and the Caribbean from CEPAL (1976, 1987) and Bulmer-Thomas (2012), resulting in 64 indices. An additional 67 indices are constructed using international prices and export weights from each missing country's reported export composition in the Yearbooks and COMTRADE. Missing compositional data is interpolated using the trend of the composition of trading partner import statistics.² The international price data includes 59 series taken from various sources, mostly referring to quotes in principle importing ports. Those prices given in c.i.f. form are adjusted using a commodity specific freight and insurance cost estimate taken principally from the UNCTAD's Review of Maritime Transport. This includes an adjustment for the closure of the Suez Canal (1967-75) and an additional cost estimate for landlocked countries. The compositional series for individual countries that formed part of a colonial customs union prior to independence (such as French West or British East Africa) is generally interpolated backwards using the compositional trends of the aggregate polity unit. The use of international prices to construct the new trade deflators makes the important assumption that domestic export prices followed international trends. We justify this assumption based on the comparison of alternative price series with our chosen series. This comparison, together with a complete listing of the sources used for the series, and a country-by-country explanation of the construction of each series, is given in appendix A.

By including many peripheral countries in Africa, Asia and the

Americas, the resulting database gives what we believe to be the first truly representative picture of world export growth during the post-war period, including 40 countries in Africa and the Americas, 25 in Asia, 24 in Europe and two in Oceania. What is more, just under half (55) of the countries in our sample experienced an independence event during the period 1950-90. This sample of decolonised countries is shown in Table 1, together with their independence year and DOTS coverage. Important omissions include countries in Africa and Asia that decolonised but for which no compositional data is available for most of the period. Despite these important omissions, our database accounts for 95 per cent of the value of world exports in current prices in 1950 and 81 per cent in 1990.

Fig. 1 displays the count of total independence events by year for the period 1945-2000 alongside a count of the countries included in our sample for the period 1945-90. Decolonisation came in several waves. The first, spanning the immediate post-war period to 1959, included 24 countries, the majority of which (16) were in Asia, including French Indochina, British India and the Japanese withdrawal from Korea and Taiwan. The 1960s witnessed the most intense period of decolonisation, with 45 countries gaining independence in the space of a decade. 18 countries were decolonised in 1960 alone. This wave focused predominantly on the French, British and Belgian colonies in Africa, as well as British colonies in the Caribbean, Asia, and Europe. The process of European decolonisation was largely completed during the 1970s and 1980s, involving independence events in every region of the world. Our sample covers 73 per cent of the independence events that occurred over the period 1950-90.³ As Fig. 1 confirms, outside of the dissolution of the Soviet Union, the frequency and number of events during the 1990s is low enough to warrant limiting our econometric analysis to the period 1950-90.

2.2. World and decolonised export growth rates

Table 2 displays growth rates for our new sample of exports at

² This methodology is like that employed by Gruss and Kebhaj (2019) for the IMF's commodity terms of trade database. It is sensitive to changes in the composition of the trading partners reporting statistics in any given year, especially for landlocked countries in Asia and Africa that traded heavily with neighbouring countries. We take a fine-toothed comb approach to the use of interpolation using import statistics, dropping any anomalous shares, and relying on period benchmarks instead of annual data in some case (the most notable being Cambodia). We also incorporate compositional data given in the *Yearbooks* but not included in COMTRADE for the period 1962-90.

 $^{^3}$ Currently, our database does not include 34 countries that decolonised during the period 1950-90. 14 of these are in Africa, eight in Asia, ten in Oceania, and two in Europe. However, apart from Oceania, each of the regions and metropole nationalities is represented in our reduced sample.

Table 1

Countries in decolonised sample (1950-90) and DOTS coverage.

Country	Independence	DOTS coverage
	year	
Countries included in empirica	apposification (4E)	
Algoria	1062	1060 61 1066 00
Algeria	1962	1960-61, 1966-90
Angola	1975	1960-74, 1981-90
Bahamas	1973	1962-90
Bahrain	1971	1974-77, 1979-90
Barbados	1966	1961-68, 1970-90
Belize	1981	1963-79, 1981-90
Benin	1960	1960-90
Burundi	1962	1969-90
Cameroon	1960	1960-90
Central African Republic	1960	1960-61, 1963-90
Chad	1960	1960-75, 1981-90
Congo	1960	1960-90
Côte d'Ivoire	1960	1960-90
Cyprus	1960	1960-90
Democratic Republic of the	1960	1963-70, 1972-90
Congo		
Gabon	1960	1960-90
Ghana	1957	1960-90
Guinea	1958	1960, 1970, 1981-90
Guyana	1966	1960-61, 1964-90
Jamaica	1962	1960-90
Kenya	1963	1960-90
Madagascar	1960	1960-90
Malawi	1964	1964, 1966-90
Malaysia	1957	1967-90
Mauritania	1960	1962-64 1966-74 1981-90
Mauritius	1968	1960-66 1968-90
Morocco	1956	1960-90
Mozambique	1975	1960-75 1977 1981-90
Niger	1960	1960-90
Nigeria	1960	1960-79 1981-90
Rwanda	1962	1964-90
Senegal	1960	1960-90
Sierra Leone	1961	1960-90
Singapore	1963	1960 1962-63 1968-90
Somalia	1960	1960 61 1963 64 1966 78
Somana	1900	1000-01, 1903-04, 1900-78,
Sudan	1056	1980-90
Sudali	1930	1900-90
Surmanie	1975	1960-61, 1963, 1965-90
Tanzania	1961	1960-90
	1960	1960-90
Trinidad and Tobago	1962	1960-90
Tunisia	1956	1960-90
Uganda	1962	1960-90
Yemen	1967	1960-71, 81-90
Zambia	1964	1964-90
Zimbabwe	1965	1964-66, 1981-90
Additional countries (10)		
Burkina Faso	1960	1960-63, 1965-90
Mali	1960	1961-90
Brunei	1984	1960-65, 1967-69, 1971-90
Cambodia	1953	1960-68, 1970, 1981-90
Antigua and Barbuda	1981	None before 2000
Dominica	1978	1976-90
Grenada	1974	1973-90
Saint Kitts and Nevis	1983	1981-90
Saint Lucia	1979	1981-90
Saint Vincent and	1979	1977-90
Grenadines		

Sources: Independence Year: Head, Mayer and Ries 2010: 13; DOTS coverage: IMF Direction of Trade Statistics.

constant prices for 131 countries during the period 1950-90. World (the sum of our 131-country sample) exports grew at 8.2 per cent per annum over the period 1950-90. Growth was particularly high during the two decades following the end of the Second World War, before slowing somewhat with the crises of the 1970s and 1980s.

The Table divides world growth into decolonised and nondecolonised groups, the former by region and metropole nationality. By decolonised, we refer to those countries in our sample that experienced decolonisation during the period 1950-1990. Of the 55-country

Table 2

Growth rates (per annum) of exports at constant prices for decolonised and non-
decolonised countries, 1950-90

	1950-90	1950-60	1960-70	1970-80	1980-90
World (131)	8.2	7.0	8.6	6.9	4.0
Non-decolonised (76)	8.3	7.2	8.7	6.8	4.1
Decolonised (55)	6.8	3.6	7.0	8.8	2.5
Africa (35)	6.6	5.4	8.0	7.8	-0.1
Americas (13)	5.3	7.6	9.0	9.9	-9.4
Asia (6)	7.1	0.9	4.7	10.1	7.2
Europe (1)	7.7	3.4	5.4	9.2	6.7
British (29)	6.6	3.5	5.9	10.3	1.8
French (19)	7.3	3.1	9.8	6.5	4.2
Other (7)	6.4	6.2	9.6	-1.3	6.1

Note: country groups are unweighted averages. Decolonised refers to countries that experienced decolonisation during the period 1950-90. Sources: see text and appendix A.

sample, around half are in Africa (35), with the other half being divided between the Americas (13) and Asia (6), and one case (Cyprus) in Europe. During the post-war period, the export performance of decolonised countries (decolonised), at 6.8 per cent per annum, was marginally worse than that of the non-decolonised world (non-decolonised, 8.3 per cent). This is true until the 1970s. There is, however, considerable variation at the regional level. Africa's long-run growth was comparable to that of Asia (at 6.6 per cent for 1950-90), with particularly high growth in the 1960s and 1970s, when the region grew faster than the non-decolonised sample. The American growth performance was also positive during the same period, before contracting violently in 1980s, coinciding with the political independence of most of the British Caribbean. Asian export growth was slower until the 1970s, and the region would experience the highest growth rates of the decolonised sample during the 1980s.⁴ During the period 1950-90, the export growth of the French decolonising countries was marginally faster than that of the British and other metropolitan powers. Growth was particularly rapid during the 1960s, before slowing thereafter. British growth peaked during the 1970s, reflecting the performances of its American and Asian (ex-)colonies.

To test if export growth in the decolonised countries was significantly different from that of independent countries over the period, we conduct a simple event study of the kind

$$\ln(ex_{it}) = \alpha + \sum_{j=2}^{5} \beta_j(j)_{it} + \sum_{k=1}^{20} \beta_k(k)_{it} + \gamma_g + \delta_t + \varepsilon_{gt}$$
(1)

where *ex* is the log of the constant value of exports for country i in year t, γ_g and δ_t are country and year fixed effects, respectively. As we discuss in further detail below, to provide a sufficient length of time to establish pre-independence trends while including as many independence events as possible from the 1950s, we define a five-year minimum pre-independence window. Thus, we include five leads (j) and 20 lags (k). The leads and lags represent binary variables that indicate the numbers of years before and after year zero, respectively. The baseline (omitted year) is lead one (j=1); one year before independence. We bin leads and lags beyond j=5 and k=20 but generate a single coefficient that indicates the long-run effect outside of the event study window, especially important for those countries with a pre-independence window higher than five years.⁵ Our sample includes the 55 countries listed in Table 1.

⁴ The overall growth performance slightly increases during the 1980s when adjusting for the inclusion of oil exporters in the sample; however, the general trend remains the same. Likewise, the exclusion of the European socialist countries in the sample (Czechoslovakia, DR Germany, Hungary, Poland, USSR, and Yugoslavia) does not alter this growth narrative to any great extent.

⁵ The event study is estimated in Stata using the user-written eventdd program, see Clarke and Tapia-Schythe 2021.

Fig. 2 displays the coefficients of the leads and lags for all decolonised countries and by metropolitan nationality. Prior to independence, the difference in the trend of export growth before decolonised and independent countries is close to zero, and the lead coefficients are statistically insignificant. Overall, export growth in our decolonised sample was on average 15 per cent lower than the independent world during the two decades following independence. However, there is a discernible difference in trends and levels by metropolitan nationality. The French colonies in our sample showed average growth rates that were 20 per cent higher than the independent world over the period, while the British and other nationality samples were 25 and 47 per cent lower. Point 20 of each trendline represents the long-run effect beyond the first two decades of independence. For the French colonies, the growth differential gradually declined to meet the independent world average after two decades, while the other colonies reversed their poor performance following independence to evince higher growth rates by the end of the period. The slower growth of the British colonies continued beyond the first 20 years of independence. Generally, the joint significance of the lagged coefficients is statistically significant for the British and Other sub-samples (which both feature p-values of zero), while that for the French sub-sample is marginally insignificant (a p-value of 0.14). This indicates that there is a clear distinction to be made between postindependence growth experiences by metropolitan nationality.

3. Monopsony and the metropolitan share of exports

3.1. Theory

Under colonial rule, the metropole typically possessed significant control over the colony's trade. This often resulted in the metropole being the exclusive buyer of the colony's exports. Colonial monopsony took several manifestations, depending on the metropolitan colonial policy and period under study. Official monopsonies were characterised by the establishment of exclusive trading companies, export marketing boards, customs unions, or preferential tariff schemes that discriminated in favour of colonial trade. Until independence, this was the most common manifestation of monopsony in the colonial world. De facto monopsonies, on the other hand, existed in situations where monopsony was not formally promulgated, but trading companies possessed sufficient market power to lock-in trade and lock-out competition (Tadei 2022, p. 562). Following independence, official monopsonistic practices were replaced by de facto ones in places where the vestiges of colonial trading companies persisted and were permitted to exert a high degree of market power.

Fig. 3 shows a simple model of exports under monopsony and competition, adapted from Deardorff and Rajaraman (2005), that links the former condition to the supply of exports. Assuming that the exporting country is a price taker for its commodity in the world market, it receives the world price Pw. The country's supply curve is Sx and under competition it exports X_c. However, the country's access to the world market is restricted by the metropole. Under the assumption that the metropole does not also possess a monopoly in the supply of the commodity to the world market, its marginal revenue from trade with the colony is Pw. As the supply curve is upward sloping, the metropole's marginal cost curve (MC_x) increases with the volume imported from the colony. Metropolitan profit maximisation is achieved by importing the quantity that sets $MC_x=P_w$. In the process, the metropole reduces the price received by the exporting country from P_w to P_m and appropriates the surplus (Pw-Pm). The process of decolonisation implies the dissolution of monopsony in both its official and de facto forms. However, trading companies granted monopsonistic privileges during the colonial

administration may continue to operate after independence, reinforcing the colonial dynamic, unless nationalised or limited by other multinational companies.⁶ Generally, however, it is expected that as the exporting country is gradually freed from the colonial institutions that generated monopsony, the country is permitted to access the world market and obtain P_w . This results in the growth of its exports from X_m to X_c .

To estimate the effect of the reduction of colonial monopsony on export growth, one must first measure monopsony. Generally, applied work on market power uses firm markups, or the price to marginal cost ratio (corresponding to P_m/MC_x in Fig. 3), as an indicator of buyer concentration (Loecker and Warzynski, 2012; Gonzalez-Garcia and Yang, 2022). This approach requires firm-level data on revenue and operating costs, which is unavailable over the whole period for our sample of decolonised countries. Tadei (2022) takes an alternative approach that is somewhat less data intensive: he calculates profit margins for British and French colonies by subtracting the export price in the colony, together with a trade cost estimate, from the metropolitan import price, and interpreting the remainder as the surplus appropriated by the metropole. Again, we lack data on export prices for most countries in our sample (hence our use of international prices to reconstruct the trade deflators). Given these problems of data availability, we use a simpler albeit more abstracted measure: metropolitan trade shares.

By design, colonial monopsony implies a metropolitan trade share of or close to one. This is for the simple reason that colonies are generally obliged to skew the geographical distribution of exports towards the metropolitan or, as an extension, imperial market.⁷ We recognise that colonial monopsonistic trading companies may not always export directly to the metropole. However, we argue that countries suffering from more extreme forms of colonial monopsonistic practices are more likely to have higher metropole trade share concentrations. On the other hand, we also recognise that high concentration of trade shares does not always equate with monopsony. It may be that countries trade more with each other relative to others for the simple reason that artificial barriers to trade are low or absent and trade is geographically distributed according to the dynamic of the gravity model (that is, by economic size and distance). Mexico's high concentration of exports to the United States is a prime example of this. Notwithstanding, we argue that the colonial context is distinct: colonial institutions were designed in such a way as to increase trade with the metropole at the expense of third parties and in favour of metropolitan or imperial welfare (Mitchener and Weidenmier, 2008) and is thus substantively different from situations of buyer concentration derived from proximity and economic size. To prevent the confounding of high trade shares derived from monopsony with those driven by the gravity dynamic, our baseline regressions in section four include controls for economic size, while geographic proximity (which is time invariant) is captured by our fixed effects. We also explore whether the erosion of concentration in non-colonial contexts affects export growth in a similar way to metropolitan monopsony.

⁶ Two well-known examples of this process are the Burmah Oil Company in British India and the Union Minière du Haut Katanga in the Belgian Congo. On these cases, see Abdelrehim et al. 2021 and Gibbs 1997, respectively.

⁷ We take the share of exports to the metropolitan country, but not those to Imperial siblings (other countries within the Imperial customs union) since trade with many of these countries was inconsistently reported. However, the exclusion of Imperial siblings from the metropolitan trade share may serve to marginally depress the size of the metropole effect on export growth. For example, French West Africa's exports to the metropole for the year 1954, as reported in the 1955 edition of the *Yearbook of International Trade Statistics*, constituted 67 per cent of its total value, while the reported value to other French colonies (Algeria, Morocco, Indochina, French Equatorial Africa) constituted a further 10 per cent. In the British case, exports from Ghana (Gold Coast) to the United Kingdom in the same year were 35 per cent of total value, while exports to other countries within the Commonwealth constituted an additional five per cent.



Fig. 2. Annual difference in export growth between decolonised and independent world following political independence (year zero). Sources: see text and appendix A.



Fig. 3. Exports under monopsony and competition. Source: Deardorff and Rajaraman 2005.

Our results indicate that this is not the case: the reduction of concentration is only a significant determinant of export growth for decolonised countries.

3.2. Metropolitan share of exports

To establish the record of the metropolitan share of exports, we construct an annual series for 45 countries in our sample that experienced an independence event during the period 1950-90. The metropolitan share is calculated as simply the value of exports to the metropolitan country divided by total exports in current prices. The sources are the same as those used to construct the composition of exports for those countries missing trade deflators, as outlined above. Unlike the reconstruction of the indices, however, we are particularly concerned about the widespread interpolation of missing observations for the trade shares, given their central role in the empirical analysis that follows. Of the 55 countries included in our growth rate sample, we drop a group of nine countries, including two landlocked French colonies in

Africa that showed unrealistically low metropolitan shares due to the inclusion of transit destinations in their statistics (Burkina Faso and Mali), one British colony in Asia that included virtually all of its exports in the share of the (future) Malaysian port of Sarawak (Brunei), and several British American colonies for which trade statistics remained unreported until late in the period (Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and Grenadines). Despite these omissions, however, we believe the remaining group of countries to be representative, given that each of these regions and metropolitan nationalities is represented by other countries in the sample. Using bilateral data on exports from the DOTS, we also calculate another standard indicator of the geographical concentration of exports, the Herfindahl-Hirschman index (HHI), which captures the level and trend of concentration with the full distribution of trading partners. The HHI is the sum of the square root of the share of each trading partner, the highest value being one, where trade is conducted with a single partner (Herfindahl, 1950: 15-24). Unlike our metropolitan share variable, the temporal coverage of the HHI is limited by the DOTS, which, as mentioned above, begins in 1960. The inclusion of the HHI, however, aids us in identifying whether it was the erosion of metropolitan monopsony or rather shifts in geographical concentration unrelated to colonial policy that affected export growth.

Fig. 4 displays the average metropolitan shares of the sample by region and by metropole nationality. Given that the United Kingdom and France together account for over 80 per cent of the decolonised sample, for the purposes of exposition we display the average shares for each of these countries and aggregate the other nationalities into a single group.⁸ To provide insight into the trend in metropolitan trade shares prior to World War II, we also include the period 1925-38. The latter is constituted by a reduced sample of countries, permitting us only to

⁸ Of the sample, the UK accounts for 22 (48 per cent), France for 17 (37 per cent), and other metropoles for the remaining 15 per cent. Of this latter group, Belgium is represented by three countries, Portugal by two, and Italy and the Netherlands by one each.



Fig. 4. Metropolitan trade shares of countries that decolonised during the period 1950-90: [A] by region and [B] by metropolitan nationality. Note: country groups are unweighted averages. Sources: 1925-38: Dedinger and Girard 2017; Korea: Ohkawa et al, 1967, Table 414; Federico and Tena-Junguito, 2019; Angola, Mozambique: Salgado 1939, pp. 14-15; Kenya-Uganda: Board of Trade 1935, 217; Board of Trade 1938, p. 241; 1950-90: United Nations, Yearbook of International Trade Statistics, various years; COMTRADE; Bulmer-Thomas 2012.

compare trends and not levels before and after the War.⁹ As can be discerned in Panel A, the average of metropolitan shares for the period 1950-90 declined from a peak of 51 per cent in 1952 to a trough of 16 per cent in 1981, remaining roughly constant thereafter. Concentration was highest in Africa and lowest in Asia. Thus, the decline of the metropolitan share was more dramatic for the African colonies than that of their Asian or American counterparts. Trends for the period 1925-90 indicate that the shock of the Great Depression contributed to a sharp increase in the metropolitan share, most likely due to the contraction of

trade with third countries. This effect was particularly strong in the Americas, but clearly affected all regions included in the sample. Panel B shows that these major trends do not change when the sample is segmented by metropole nationality. There is, however, a discernible difference in the levels of concentration, the French colonies being higher than the rest due to the predominance of Africa in France's colonial endowment. This evidence, albeit subject to the possible sampling issues highlighted above, indicates that the French colonies in Africa were the most concentrated, and were also those that experienced the sharpest fall in their metropolitan shares following independence.

It is important to highlight that, overall, the reduction of dependence on the metropole did not imply increased concentration in other markets. To support this statement, we graph the HHI in Fig. 5 by metropole nationality, both with (panel A) and without (panel B) the metropole. As mentioned, the DOTS series begins in 1960, so we are unable to show 1950s trends, when dependence on the metropole was particularly high. The unweighted average of all countries (bold line, Panel A) displays a dramatic fall during the 1960s, which mostly reflects the decline of the

⁹ This sample includes 26 countries and three aggregates: Algeria, French West Africa, Cameroon, French Equatorial Africa, Madagascar, Morocco, Togo, and Tunisia in French Africa; Indochina in French Asia; Ghana, Kenya-Uganda, Malawi, Mauritius, Nigeria, Sierra Leone, Sudan, Tanzania, Zambia, and Zimbabwe in British Africa; Malaysia and Yemen in British Asia; Bahamas, Barbados, Guyana, Jamaica, and Trinidad and Tobago in the British Americas; and Cyprus. The Other category includes Angola and Mozambique (Portugal).



Fig. 5. Herfindahl-Hirschman indices of concentration of countries that decolonised during the period 1950-90, by metropole nationality, 1960-90: [A] Full distribution, [B] Distribution minus metropole. Note: country groups are unweighted. Source: IMF Direction of Trade Statistics.

French ex-colonies following independence, with little change during the 1970s and 1980s. There appears to be less of a decline in concentration for the British colonies, while the average of the other metropole nationalities fluctuates considerably. When the metropole is removed from the distribution (Panel B), the decline of the 1960s becomes less pronounced, suggesting that this trend was driven by the reduction of the metropole share. Levels of concentration are below those of the HHI including the metropole. This indicates that, generally, declining metropole shares were gradually replaced by a moderate number of countries, and exports were distributed between them in a moderately egalitarian fashion. In other words, there was no substitution of the metropolitan monopsony.

4. Empirical specification and results

4.1. Empirical strategy

Before outlining our empirical strategy, we address two important issues that affect our specification. The scale of our database (Macro panel, medium N and T) introduces a series of time series properties that results in major identification problems for the standard two-way fixed effects-Ordinary Least Squares (2FE) estimator. These properties are detected using a series of preliminary tests for nonstationarity, crosssectional dependence and slope heterogeneity.¹⁰ The results indicate that these are all salient characteristics of our data. Thus, we employ an estimator designed to account for issues of nonstationarity, cross-sectional dependence and heterogeneity in macro panels, the Augmented Mean Group estimator (AMG).¹¹ Although technically incorrect, we also display the main results using the 2FE for comparative purposes.

Another major empirical issue is that of the endogeneity of independence. This has been dealt with in other empirical treatments of decolonisation and trade (Head et al., 2010: 1; Lavallée and Lochard, 2015: 618) but, given the political importance of the export economy in many decolonised countries, deserves revisiting here. Although there was no common historical cause of independence, there is no doubt that the political and economic characteristics of both the metropole and the colony served to define the timing of this process. For our purposes, the key question is whether the export growth dynamic preceding independence generated political pressures that culminated in independence. Historical treatments of decolonisation suggest otherwise. In most cases, the seeds of the decline of European Empire were evident before World War II and did not involve the state of trade. The predominant explanations of the fall of Empire, being the spread of the democratic franchise in the metropole, growing resistance in the colonies, and the growing post-war international pressure towards decolonisation, are political, and do not involve the export economy (Gardner and Roy, 2020: 169-88; Gallagher, 1982: 152-53). Political independence instead responded to a complex interplay of forces, expedited by the interconnected nature of the imperial system (Fieldhouse, 1966: 405). Whether these forces served to influence export growth and metropolitan trade shares and confound our estimates is a more relevant empirical question than that of potential endogeneity, and one we seek to address with a comprehensive set of controls.

Our principal hypothesis is that the metropolitan trade share - our proxy for the degree of colonial monopsony - is negatively associated with export growth following political independence. Following the model discussed in section three, we interpret a significant postindependence effect in terms of colonial trade policy: the reduction of colonial monopsony permitted countries to trade more with the world, driving export growth. To test this hypothesis, we regress the log of exports on metropolitan shares interacted with a dummy for both preand post-independence, together with a set of controls for both observable and unobservable factors. To explore the issue of group heterogeneity, we further segment our sample into regional and metropole nationality characteristics. In the absence of a standard model of export growth, we follow the logic of the gravity model and include the GDP of the metropole and exporter as standard time variant controls. The addition of the latter reduces our sample, due to the absence of GDP data for five countries (Somalia, Bahamas, Belize, Guyana, and Suriname). To include these countries, we also run regressions using the population of the metropole and exporter. We provide the coefficients for both pre- and post-independence metropolitan shares, as we are also interested in ascertaining whether the effect was generalised over the

period or became significant only after independence.¹² The comparison of pre- and post-independence effects requires a decision regarding the minimum pre-independence window, which we define as five years.¹³ As a consequence, we also drop one country (Cambodia) that experienced independence during the period 1950-55, giving a total sample size of 40 (or 45 with population), as shown in Table 1. Our sample includes 33 countries in Africa, seven in the Americas, four in Asia, and one in Europe. The sample is skewed towards Africa for the simple reason that most of the countries that achieved independence during this period were African (48 per cent of the independence events over the period 1950-90 occurred in Africa). Many of the principal independence events in Asia (India, Pakistan, Myanmar, Sri Lanka, Indonesia, Indochina) occurred during the period 1945-1955, and we drop these, as well as countries in other regions, from our decolonised groups due to the absence of a five-year pre-independence window. However, we include this group of countries in our robustness checks to ascertain whether their omission reduces the explanatory power of our baseline regressions. Those countries omitted from the Americas and the Pacific are not included because trade deflators were not easily constructable or data on metropole shares was missing. Following Head et al. (2010), we argue that other unobserved metropole and colony characteristics associated with independence are captured by our triple controls: time-invariant country characteristics (country-specific constants), time-varying country effects (country-specific time trends), and shared time-varying common effects across members of the panel (an estimated common dynamic process subtracted from the dependent variable for each country).

In what follows, we compare the results from regressions using the 2FE estimator with those obtained using variants of the AMG estimator. Our baseline 2FE regression takes the form:

$$ex_{it} = \alpha_i + \gamma_t + \theta_i + \beta_1 Y_{mt} + \beta_2 Y_{it} + \beta_3 (ms_{it} * I_{pre,it}) + \beta_4 (ms_{it} * I_{post,it}) + \varepsilon_{it},$$
(2)

where ex_{it} is the log of total exports in constant prices for country *i* in year *t*, Y_{mt} is the log of the GDP of the metropole m of country i in year *t*, Y_{it} is the log of the GDP of country i in year *t*, ms_{it} is the log of one plus the metropolitan share of exports from country *i* in year *t*, *I* is a dummy for the treatment (pre- or post-independence) period, and γ and θ are year- and country-specific fixed effects, respectively. 2FE controls for common unobservable shocks over time by way of the inclusion of γ , however it suffers from three important problems. Firstly, it does not account for issues of nonstationarity prevalent in our data. Secondly, it assumes that the impact of unobservable shocks is homogeneous across countries. This generates issues of identification, as problems of cross-sectional dependence may still be present after controlling for γ and bias the coefficients and their significance. Given that groups of countries in our sample experienced independence at the same time, were

¹⁰ These include first- and second-generation panel unit root tests (Maddala and Wu 1999 and Pesaran 2007), with and without the null assumption of cross-sectional independence, standard panel tests for cointegration (Pedroni 1999, Westerlund 2015, and Kao 1999), a CD-test for cross-sectional dependence (Pesaran 2004), and a test of slope heterogeneity for large panels (Bersvendsen 2021). The complete results can be found in appendix B.

¹¹ The AMG estimator is run in Stata using the xtmg user-written command, see Eberhardt 2012. For a general discussion of the procedure and its application to the estimation of total-factor productivity, see Eberhardt and Teal 2010, 2011 and Eberhardt, Helmers and Strauss 2013.

¹² In the AMG specification, this means segmenting our predictor of interest into separate pre- and post-independence variables, as the estimator does not permit the inclusion of interaction terms in Stata. However, this is the equivalent of including a # term in the 2FE case, and the inclusion of zeros before and after independence does not appear to bias the size nor significance of the coefficients. Furthermore, we do not report differences-in-differences type 'differences in pre-post trends' coefficients, as these may lead to erroneous conclusions regarding the significance of the post-independence effect. Controlled interrupted time series (CITS) regressions (unreported) show that the pre-post trend difference for many controls is not significant, while country-specific AMG regressions detect significance for many of the same countries for the post-independence period. Results of the CITS and country-specific AMG regressions available on request.

¹³ There is no standard in the literature regarding the minimum length of the pre-treatment period. We prioritise sample size over the validity of our pre-independence estimates, however, given that our coefficient of interest is the post-independence effect.

characterised by similar (colonial) institutions, resource endowments, and other time invariant geographical attributes, the issue of crosssectional dependence is particularly important for our specification. Finally, 2FE also suffers from the problem of serially correlated residuals.

Alternatively, the AMG proceeds in two-stages. First, it runs an OLS regression with year dummies in first differences that takes the form

.

$$\Delta e \mathbf{x}_{it} = \beta_1 \Delta Y_{mt} + \beta_2 \Delta Y_{it} + \beta_3 \Delta (ms_{it} * I_{pre,it}) + \beta_4 \Delta (ms_{it} * I_{post,it}) + \sum_{t=2}^{T} \gamma_t \Delta Year_t + \Delta \varepsilon_{it},$$
(3)

The first differenced year dummies are then collected $(\hat{\gamma}_t)$, and subtracted from the outcome variable in a second-stage regression, which also includes a country-specific fixed effect (α) and country-specific time trends (*t*) to control for additional time-varying unobservables:

$$(ex_{it} - \hat{\gamma}_t) = \alpha_i + \beta_1 Y_{mt} + \beta_2 Y_{it} + \beta_3 (ms_{it} * I_{pre,it}) + \beta_4 (ms_{it} * I_{post,it}) + \delta_i t + e_{it},$$
(4)

Estimation can also be performed with $\hat{\gamma}_t$ on the right-hand side:

$$ex_{it} = \alpha_i + \beta_1 Y_{mt} + \beta_2 Y_{it} + \beta_3 \left(ms_{it} * I_{pre,it} \right) + \beta_4 \left(ms_{it} * I_{post,it} \right) + \widehat{\gamma}_t + \delta_i t + e_{it},$$
(5)

The resulting coefficients represent unweighted average effects across countries. Given that these unweighted averages may be biased by countries with outlying absolute residuals, we also control for this by presenting weighted averages in our robustness checks. The removal of cross-sectional dependence controls the bias generated from the clustering of our outcome variable. Furthermore, we include specifications with heteroskedasticity-robust standard errors in our robustness checks. The choice between [4] and [5] and the use of country-specific time trends depends on the chosen estimator's relative precision, ascertained by a comparison of the root mean square error (RMSE), and ability to control for cross-sectional dependence (CD). In what follows, we proceed by running iterations of each regression with [4] and [5] with and without group-specific time trends and select those that successfully control for CD. In the case that more than one specification does this, we pick the estimation with the lowest RMSE.

Alongside the standard control of GDP, we include three time-variant controls to check the robustness of our baseline results. The first is the other important form of export concentration: the log of the share of the dominant 'colonial' (pre-independence) product in total exports (Product share). Many decolonised countries possessed high commodity concentrations that declined during the post-war period alongside the reduction of metropole concentration. The second is a proxy for the demand of this 'colonial' product in the metropolitan market, to test for the possibility that declining metropolitan shares merely reflected some form of product-specific demand shock (such as substitution through technological innovation). This is the log of the total import value in constant prices of the colonial product in the metropole market (Product demand). The third is the level of both internal and external conflict, which was high for many countries around independence and gradually declined over time. The data for Product share and Product demand come from the same sources as the metropolitan trade shares. The series on conflict is taken from the Major Episodes of Political Violence (MEPV) and Conflict Regions database, from the Center for Systemic Peace, and refers to the total summed magnitudes of all societal and interstate major episodes of political violence (Marshall, 2019).

4.2. Results

Table 3 displays the results for the full sample of decolonised countries. Columns one and two report the results using 2FE and columns three through eight those with variants of the AMG estimator. Of the

controls, the GDP of the exporter is positive and statistically significant across the board, while the significance and coefficient sign of the GDP of the metropole is sensitive to the specification. Unlike GDP, neither the population of the metropole nor that of the exporter is significant. Of the other controls included, only conflict is statistically significant (and negative, following intuition). The post-independence coefficient is significant for all estimations, and the average size of the effect is economically large: a one unit (percentage point) decrease in the metropolitan share is associated with a 0.92 to 1.28 per cent increase in export growth, depending on the specification. The coefficients on the pre-independence metropolitan shares, however, are also consistently negative and statistically significant (an exception being column two), with the size of the coefficient being comparable to the postindependence effect in some cases. This suggests that the reduction of the metropolitan trade share was driving export growth before independence occurred, although, as we shall see, this finding conceals an important degree of heterogeneity across metropole nationalities. Columns seven and eight show the results controlling for the general level of geographical concentration of exports, including (HHI) and excluding (HHI No Metro) the metropole. Given the temporal coverage of the DOTS, we are unable to include pre- and -post independence interactions, so we merely display the results for the whole period (the panel becomes unbalanced with the inclusion of the HHI and begins in 1960). While the inclusion of both controls changes the size of the metropolitan share coefficient, it does not seriously affect its direction or statistical significance. Furthermore, the coefficient on the HHI in column seven shows the opposite sign (positive), and both are statistically insignificant.¹⁴ Our post-diagnostic tests show the unsuitability of 2FE for our panel. Not only does its accuracy pale in comparison with that of the AMG (the RMSE of the 2FE is more than twice that of the AMG specifications), but the CD test detects a significant level of crosssectional dependence. This is not the case for any of the AMG specifications. The implication of this for model interpretation can be seen by the size of the coefficients, which are much smaller than the AMG point estimates.

The statistically significant pre-independence coefficient suggests that the metropolitan share effect was not just a post-independence phenomenon. However, further segmentation by metropole nationality and by region (Table 4) reveals important differences in the size and significance of this effect. The pre-independence coefficients for British Africa and America (shown in column one) are negative and statistically significant, while that of Asia is positive. This indicates that the reduction of monopsony was driving export growth before independence for the British colonies of Africa and America. The French case (column two) is different; only the post-independence coefficient for French Africa is significant. This result accords with that of Lavalleé and Lochard (2015), who also found a similarly strong and negative effect for the French colonies. Like British Africa, a significant pre-independence effect is detected for the other metropole nationalities (column three), but the post-independence coefficient is positive and not statistically significant. This estimation, however, is plagued by significant levels of cross-sectional dependence, most likely due to the small sample size (five countries, 205 observations). Thus, the results of column three should be interpreted with an extreme degree of caution. The post-independence coefficient for British Africa is larger than the other metropolitan nationalities, although it is possible that this could be driven by a compositional effect. We explore this in greater detail in the robustness checks. Overall, these results show that the reduction of the share of the metropole in total exports was associated with export growth during the period (except in British Asia). In the case of the

¹⁴ There is, however, a considerable amount of heterogeneity of the HHI effect at the regional level. The coefficient for Africa is negative, as one would expect, and positive for Asia and America. None of these results are statistically significant.

Table 3Results for full decolonised sample.

	1	2	3	4	5	6	7	8
Estimator:	2FE	2FE	AMG-i	AMG-it	AMG-it	AMG-it	AMG-t	AMG-t
GDP metro	1.77***	1.75***	40	-1.07***	-	-	54	49
	(.14)	(.17)	(.25)	(.42)			(.49)	(.44)
GDP exporter	1.09***	1.03***	1.24***	.82***	-	-	.59***	.53**
	(.06)	(.06)	(.23)	(.14)			(.22)	(.23)
Population metro	-	-	-	-	-2.23	-2.29	-	-
					(3.22)	(2.04)		
Population exporter	-	-	-	-	.67	89	-	-
					(1.53)	(1.32)		
Product share	-	18	-	13	-	.04	31	43
		(.12)		(.19)		(.17)	(.20)	(.26)
Product demand	-	03	-	.01	-	04	.02	.03
		(.04)		(.06)		(.04)	(.05)	(.05)
Conflict	-	04***	-	02*	-	03***	04**	04**
		(.01)		(.01)		(.01)	(.02)	(.02)
HHI	-	-	-	-	-	-	.28	-
							(.33)	
HHI no metro	-	-	-	-	-	-	-	35
								(.38)
Metro share:								
Pre	47***	29	-1.00**	99***	92***	96***	-	-
	(.17)	(.18)	(.43)	(.37)	(.32)	(.28)		
Post	43***	27**	-1.28***	-1.13***	92**	-1.22***	-1.36***	-1.21***
	(.16)	(.16)	(.38)	(.40)	(.38)	(.32)	(.41)	(.39)
RMSE	.47	.47	.23	.18	.24	.19	.14	.14
CD	.00	.00	.25	.65	.41	.39	.25	.26
Obs.	1,640	1,640	1,640	1,640	1,845	1,845	1,108	1,108
Countries	40	40	40	40	45	45	40	40

Outcome: the log of total export value at constant prices. Predictors: GDP metro is the log of the GDP of the metropole, GDP exporter is the log of the population metro is the log of the population of the metropole, Population exporter is the log of the population of the exporter, Product share is the log plus one of the share of the 'colonial' product(s) in total export value at current prices, Product demand is the log of the total value of metropole imports at constant prices of country *i*'s 'colonial' product, conflict is the sum of the degree of international and domestic conflict, Metro share is the share of exports directed to the metropole. 2FE is two-way fixed effects OLS. AMG-i is Augmented Mean Group with an imposed common dynamic process with unit coefficient. AMG-it is Augmented Mean Group with an imposed common dynamic process with unit coefficient with group-specific linear trends. AMG-t is Augmented Mean Group with the common dynamic process included as regressor, with group-specific linear trends. RMSE is the root mean square error. CD is the p-value of the Pesaran (2004) test of cross-sectional dependence (H₀ of cross-sectional independence). Figures in parenthesis are standard errors. Sources: exports: see text and appendix A; GDP and population: Bolt and van Zanden 2020; metro share, product concentration and demand: United Nations, Yearbook of International Trade Statistics, various years; COMTRADE; Bulmer-Thomas 2012; conflict: Marshall 2019; HHI: IMF Direction of Trade Statistics.

British and other metropole nationalities, this occurred during the colonial administration, while in the French case this was a post-independence phenomenon.

4.3. Robustness checks

Despite our attempts to control for both observable and unobservable factors, it is possible that we are merely identifying an effect that was generalised across the poor periphery during the period. To verify this, we perform the same exercise on an expanded sample. This is constituted by 86 countries, including the 40 country decolonised sample plus four additional control groups of countries with varying forms of trade dependence, following Kleiman (1977): those countries that decolonised during the immediate post-war period 1945-50 (13 countries), those that decolonised during the period 1900-45 (eight countries), and those countries that showed a relatively high trade dependence on the United States (19 countries)¹⁵ and the Soviet Union (six countries) at some point during the post-war period. ¹⁶ While these groups aggregate a considerably heterogeneous collection of countries, we contend that this heterogeneity is no different from that found in our

decolonised sample. Fig. 6 displays the average shares in exports by independence year and dependence type. While the three groups of decolonised countries show similar declines in their metropolitan shares, the levels are decidedly different, with an average difference of around 20 per cent between the lowest (1945-50) and highest (1950-90) group in 1950. By 1990, this gap had fallen to only eight per cent. Independent America was the most trade dependent group of the sample, lying above the three decolonised groups for most of the period.¹⁷ By the mid-1960s, the Soviet satellites had also overtaken the decolonised groups in terms of dependence, and thereafter vied with America for the most trade dependent group, according to our categorisation.

We include the standard GDP controls, but, due to the difficulties of calculating product concentration and demand variables for such a large panel, we leave out the additional three controls. Table 5 shows the results for the entire sample of 86 countries (column 1) and the independence-period and dependence-type interactions (column 2). As many of the countries included here were independent or achieved independence before 1950, we do not provide pre- and post-independence interactions. In aggregate terms (column one), the coefficient on export shares to the metropole or 'neo-metropole', is negative and significant. However, the results by independence-period and dependence-type reject the possibility that the negative metropolitan share effect was a periphery-wide phenomenon. The coefficients for all the groups bar our

 $^{^{\}rm 15}$ This group includes Canada, Mexico, and most of Central and South America.

¹⁶ The latter group includes two countries – China and Cuba – that experienced dramatic changes in their export relationship with the Soviet Union during the period. We include them here for purposes of comprehensiveness, as the significance and direction of the reported coefficient is not sensitive to their exclusion.

¹⁷ We should highlight that we do not exclude several countries with a relatively minor degree of export dependence on the United States, including Argentina, Peru, and Paraguay, which serve to depress the average shares.

Table 4

Results for metropole nationality sub-sampl	es t	DY 1	region
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	1	2	3
Estimator:	AMG-it	AMG-it	AMG-t
Nationality:	British	French	Other
GDP metro	41	32	34
	(.69)	(.58)	(.84)
GDP exporter	.82***	.92***	.96***
	(.22)	(.24)	(.36)
Product share	.35	59*	12
	(.22)	(.31)	(.24)
Product demand	10	01	.02
	(.06)	(.12)	(.14)
Conflict	.00	03*	05***
	(.02)	(.02)	(.02)
Metro share:			
Africa			
Pre	-1.22***	38	-1.56***
	(.47)	(.35)	(.60)
Post	-1.13***	97**	.40
	(.45)	(.42)	(1.42)
America			
Pre	24*	-	-
	(.14)		
Post	27	-	-
	(.17)		
Asia			
Pre	.62	-	-
	(.41)		
Post	.24	-	-
	(.47)		
Europe			
Pre	14	-	-
	(.14)		
Post	15	-	-
	(.15)		
RMSE	.17	.20	.15
CD	.71	.13	.00
Obs.	779	656	205
Countries	19	16	5

Outcome: the log of total export value at constant prices. Predictors: GDP metro is the log of the GDP of the metropole, GDP exporter is the log of the GDP of the exporter, Product share is the log plus one of the share of the 'colonial' product (s) in total export value at current prices, Product demand is the log of the total value of metropole imports at constant prices of country *i*'s 'colonial' product, conflict is the sum of the degree of international and domestic conflict, Metro share is the share of exports directed to the metropole. AMG-it is Augmented Mean Group with an imposed common dynamic process with unit coefficient, with group-specific linear trends. AMG-t is Augmented Mean Group with the common dynamic process included as regressor, with group-specific linear trends. Figures in parenthesis are standard errors. Sources: as per Table 3.

decolonised 1950-90 sample are insignificant. Those for the pre-War decolonised, USA- and Soviet-dependent groups are positive, but far from statistical significance. We admit that these findings are subject to potential aggregation bias, but for the purposes of our analysis they serve to confirm the robustness of our baseline results.

As additional checks we repeat our baseline regression with an alternative outcome variable (exports per capita), 'outlier-robust' coefficients,¹⁸ and with an alternative estimator that also addresses the issues of nonstationarity and cross-sectional dependence in a different way: the Pesaran (2006) Common Correlated Effects (CCE) mean-group estimator.¹⁹ The results of these exercises are presented in appendix C. The post-independence coefficient on the metropolitan shares remains significant for the regressions with exports per capita (Panel A), and with 'outlier-robust,' weighted means (Panel B), indicating that our baseline results are not biased by the form of the dependent variable or outlying countries. In the latter case, we present the weighted mean coefficients of the core results of our study: the baseline and metropole nationality pre- and post-independence coefficients for Africa. The size of the metropolitan share coefficient is reduced in all cases. The size of the British and French African post-independence coefficients is now comparable (at -0.78 and -0.72, respectively), indicating that the presence of outlying countries was considerably biasing upwards the size of the coefficient in the British case. Finally, the CCE estimator produces comparable results to our baseline in terms of significance and the size of the coefficients, although we detect a significant level of cross-sectional dependence, further confirming the superiority of the AMG estimator in our context. Overall, our robustness checks support our initial findings.

5. Alternative explanations

Our finding that export growth was driven by the reduction of the metropolitan trade share, but that there were substantive differences across metropolitan nationalities, indicates that the type of colonial institutions - and their role in strengthening or weakening metropolitan monopsony - was a key determinant of trade growth both before and after independence. Indeed, there were substantial differences in the colonial preferential systems of the European imperial powers that affected the barriers to geographical diversification and thus levels of monopsony. In the British case, preferential rates were lower. Before the Great Depression, Commonwealth exporters were awarded an average preferential rate of between two to three per cent. Following the Ottawa Conference of 1932, this rose to 10 to 12 per cent, mainly due to the increase of tariffs on imports from countries outside of the Commonwealth, rather than a reduction of the imperial rate. This fell to around six per cent during the post-war period (MacDougall and Hutt, 1954: 256-57). The maintenance of the preferential system was sharply offset by British membership in the European Community (EC), which resulted in a large diversion of trade away from the Commonwealth towards Europe (Anderson and Norheim, 1993: 95). The French system was considerably different. Many colonial possessions were given free trade status after the adoption of a customs union in 1892. This continued during the post-war period, combined with non-tariff measures that insured artificially inflated market access for colonial producers in the metropole (Lavalleé and Lochard, 2015). The consequence was a higher degree of concentration of exports in the French metropolitan market.

The idea that French colonial policy was more monopsonistic than the British must be balanced by two alternative explanations that have emerged from a focus on the African experience. Tadei (2022: 572-75) showed that monopsonistic profit margins in Africa during the period 1898-1939 depended more on location than on the nationality of the metropole. Countries in West Africa, whether French or British, given their access to the Atlantic economy, possessed a longer history of integration in the commodity trade with Europe and North America. This longer history allowed colonial trading companies to become entrenched and monopolise their positions, while higher levels of commercialisation increased the dependence of African producers on trade. This experience is contrasted with that of East Africa, which faced the Indian Ocean, possessed a shorter history of trade with Europe, lower levels of commercialisation, and higher costs of establishing monopsonies. Austin (2010: 12) argued that another difference between colonies was important for explaining the variation in long-run economic outcomes: "the extent and form of European appropriation and use of land," with an important distinction between settler and peasant economies. Tadei (2022) applied the settler-peasant economy typology to the observed variations in levels of monopsonistic profit, showing that it was an important determinant. The costs of imposing monopsony were lower in those areas where African smallholders dominated cash crop production and European producers were marginal or non-existent, due

¹⁸ This regression is 'outlier-robust' in the sense that it generates a weightedaverage effect, using the absolute residuals of a preliminary regression as weights, and Huber or biweight weighting functions. See Hamilton 1991: 21-22.

¹⁹ CCE includes panel averages of the dependent and independent variables on the right-hand side. It is estimated with the previously cited xtmg command.



Fig. 6. Metropolitan trade shares by independence period and dependence type, 1950-90. Sources: 1950-90: United Nations, Yearbook of International Trade Statistics, various years; COMTRADE; Bulmer-Thomas 2012.

Table 5

Results for expanded sample and independence-period and dependence-type interactions.

	1	2
Estimator:	AMG-it	AMG-it
GDP metro	30	31
	(.26)	(.26)
GDP exporter	1.03***	1.02***
	(.15)	(.15)
Metro share:	52**	
	(.23)	
Independent 1950-90	-	52***
		(.19)
Independent 1945-50	-	08
		(.10)
Independent 1900-45	-	.03
		(.03)
USA dependent	-	.03
		(.07)
USSR dependent	-	.01
		(.05)
RMSE	.21	.21
CD	.19	.31
Obs.	3,521	3,521
Countries	86	86

Outcome: the log of total export value at constant prices. Predictors: GDP metro is the log of the GDP of the metropole, GDP exporter is the log of the GDP of the exporter, metro share is the share of exports directed to the metropole. AMG-it is Augmented Mean Group with an imposed common dynamic process with unit coefficient, with group-specific linear trends. Figures in parenthesis are standard errors. Sources: as per Table 3.

to the lower political power of the smallholders to counteract monopsony. On the other hand, the establishment of monopsonies in the settler economies, in which land was appropriated by European settlers and political institutions were largely usurped for their interests, was far more costly. Thus, monopsonistic profit margins were lower in those areas characterised by settler economies.

The relevant corollary of these propositions is that the metropolitan share effect on export growth should be stronger for those countries with higher levels of monopsonistic profit: those with Atlantic access and peasant export-type economies. We assess the veracity of these

explanations in two steps. First, we establish whether there are differences in the levels of metropole concentration depending on location and colony-type. We divide our sample into countries with coastal access to the Atlantic Ocean and those without, and countries identified as settler economies and those where European settlers did not play a major role.²⁰ Panel A and B of Fig. 7 display the metropolitan trade shares of these two groups, respectively. While there are marginal initial differences in the level of concentration, Panel A does not support the contention that the countries in our sample with access to the Atlantic possessed a higher concentration - and more dramatic postindependence reduction – of metropolitan trade shares.²¹ The difference between the two is at its highest in 1952 at seven per cent. Panel B provides more convincing evidence in favour of the settler-peasant economy typology, with the metropolitan share being around 15 per cent higher in the latter group during the early-1950s, although the gap gradually closes over the next decade.

This comparison of average levels, however, reveals nothing on the

 $^{^{\}rm 20}\,$ The Atlantic access group includes Angola, Benin, Cameron, Congo, Ivory Coast, the Democratic Republic of the Congo, Gabon, Ghana, Guinea, Mauritania, Morocco, Nigeria, Senegal, Sierra Leone, Togo, Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname, and Trinidad and Tobago. The settler group includes Algeria, Angola, Congo, the Democratic Republic of the Congo, Kenya, Mozambique, Zambia, Zimbabwe, Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname, and Trinidad and Tobago. Our identification of the settler economies is based on the consultation of secondary literature, predominantly Lloyd et al. (2013). As Good (1976: 598) argued, however, the concept of settler colonialism "...does not imply that no common characteristics exist with non-settler colonial societies, nor that there are significant differences between [settler societies]." Moreover, these static descriptions do not consider the transition between peasant and settler modes of production that may have occurred over time (particularly following independence). Evidently, a comprehensive account of the characteristics of each settler/peasant economy and how they changed over time is beyond the scope of this paper. However, such issues may affect the significance and interpretation of our results and should be taken into account by the reader.

²¹ As mentioned previously, these shares do not include exports to other Imperial siblings and may therefore underestimate the value of those monopsonistic colonial companies that traded with countries inside the Imperial customs union other than the metropole.



Fig. 7. Metropolitan trade shares: [A] Atlantic access vs. no Atlantic access and [B] Settler vs Peasant, 1950-90. Sources: As per Fig. 2.

correlation between country-level trends in the metropolitan trade share and export growth. In a second step, we compare the coefficients on the metropole share by location and colony-type. Table 6 displays the results for the entire sample (column 1) and segmenting by metropole nationality (columns 2 to 4). As above, we include our set of controls, but they are unreported. Overall, the metropole effect is only significant for those countries with access to the Atlantic. Both pre- and post-independence coefficients are significant. The overall case of the settler-peasant typology is less clear-cut. While the pre- and post-independence coefficients of the peasant group are significant, so is the pre-independence coefficient of the settler group (albeit only at 10 per cent). Disaggregation by metropole nationality provides a clearer picture. The British Atlantic group is marginally significant in both pre- and postindependence periods, while only the French post-independence coefficient is significant, confirming the results from Table 4. The postindependence coefficient of the British settler and French peasant groups are both significant. The metropolitan share coefficients of the other metropole nationalities remain insignificant.

Together, these results point in multiple directions: the consistent significance of the French post-independence coefficients across location and colony-type suggests that institutional change derived from independence was important, while the significant Atlantic coefficients indicate that location was important for explaining both the British and French effects. On the other hand, the results for the settler-peasant typology are more difficult to interpret, perhaps confirming Austin's (2010: 20) observation that "Comparison of the economic legacies of European rule ... in "settler" and "peasant" economies is complicated by the many variations between individual colonies." The size of the coefficients in the peasant sample are generally larger than those of the settler samples, possibly indicating that the effect of the metropolitan share on export growth was stronger in peasant colonies. These results, however, are subject to the bias resulting from the incorrect assignment of countries to the settler and peasant categories, as discussed above, and should be interpreted with caution.

Overall, our findings by location and metropole nationality paint the following picture: political independence allowed (perhaps imperfectly) the countries in our decolonised sample to develop fresh trading relations and diversify their trading partner portfolio. However, geography remained a steep barrier to climb for poor, newly independent countries attempting to integrate themselves into international commodity markets, and thus retarded growth at the geographical extensive margin. Further evidence of this is found in the trends of the shares of third countries in the geographical distribution of the decolonised countries. We divide these into the average shares of exports for those decolonised countries with access to the Atlantic and those without direct access. Fig. 8 displays five-year benchmark estimates of export shares from these two groups to the metropolitan country (Metro), the United States, market-orientated economies of Europe, the centrally planned economies of Europe, and the rest of the world. For those countries that had access to the Atlantic economy, exports to the metropole were largely replaced by trade with Western Europe and the United States. Outside of these areas, the decolonised countries facing the Atlantic maintained their trade shares with other, mostly Atlantic, poorer countries in the Americas and Africa. In the case of those countries without direct access to the Atlantic Ocean, trading networks in the Indian and Pacific Oceans predominated. The rapidly declining metropolitan share mostly went to countries not directly associated with the Atlantic economy, with Western Europe and the United States playing second and third fiddle, respectively. In both cases, the USSR and European Soviet-satellites remained minor players in the trading partner profile of the decolonised countries.

The problem for those countries without access to the Atlantic economy was that the post-war Golden Age of economic growth was mostly an Atlantic (and, as a by-product, Mediterranean and North Sea) phenomenon. While the geographical pole of economic growth would shift from the mid-1970s onwards, the trading relationships that characterised the twentieth century partner portfolio of the decolonised countries had already been defined. Thus, geography prevented many of these countries from exploiting the post-war reconstruction and catchup growth in Europe and later the increased market access to the European Community. For these countries, the reduction of the metropolitan trade share was not an important driver of export performance. Instead, growth was most likely derived from other sources, including the intensive and product extensive margins.

6. Conclusions

Although previous research using the gravity model has drawn contradictory conclusions, the findings of this paper indicate that political independence mattered for export growth. The strength and significance of the effect, however, depended on both the nationality of the metropole and location. We thus draw two major conclusions regarding the long-run effect of decolonisation on export growth: one regarding policy, one regarding geography. Firstly, colonial trade policy was important for the sources of post-independence export growth, and the nature of colonial policy evidently differed across colonisers. As we have seen, those countries that possessed higher pre-independence export dependence on the metropolitan market (predominantly French Africa, with some exceptions) were precisely those countries for which the reduction of the metropolitan trade share mattered following political independence. In the British African and Aerican cases, the metropolitan trade share was already a statistically significant determinant of export growth during the colonial period. That the reduction of metropolitan concentration was driving export growth prior to independence indicates that British colonial policy - at least, regarding the geographical distribution of exports - was perhaps less monopsonistic than its Continental European equivalents. Secondly, policy was important, but geography still weighed heavily on post-independence outcomes. Specifically, access to the Atlantic economy permitted export growth as the result of reduced trade with the metropole. It implied a longer

Table 6

Results for Atlantic and	no Atlantic access,	, and settler and	l peasant, su	b-samples
by metropole nationalit	y.			

	1	2	3	4
Estimator:	AMG-it	AMG-it	AMG-it	AMG-it
Nationality:	All	British	French	Other
Metro share:				
No Atlantic				
Pre	25	15	07	-1.03
	(.26)	(.52)	(.05)	(.66)
Post	28	36	10	38
	(.27)	(.54)	(.07)	(.33)
Atlantic				
Pre	49***	55*	21	14
	(.18)	(.30)	(.23)	(.09)
Post	58**	66*	64**	.29
	(.24)	(.35)	(.29)	(.59)
RMSE	.18	.17	.20	.16
CD	.62	.98	.13	.00
Settler				
Pre	18*	32	.03	07
	(.11)	(.21)	(.05)	(.08)
Post	16	35**	10	.48
	(.14)	(.16)	(.07)	(.65)
Peasant				
Pre	57*	41	34	-1.10
	(.30)	(.56)	(.22)	(.72)
Post	71**	71	66**	48
	(.33)	(.63)	(.29)	(.31)
RMSE	.18	.17	.20	.16
CD	.70	.94	.16	.00
Obs.	1,640	779	656	205
Countries	40	19	16	5

Outcome: the log of total export value at constant prices. Predictors: metro share is the share of exports directed to the metropole, other predictors as per Table 4, results not displayed. AMG-it is Augmented Mean Group with an imposed common dynamic process with unit coefficient, with group-specific linear trends. Figures in parenthesis are standard errors. Sources: as per Table 3.

history of trade and higher levels of commercialisation and metropolitan monopsony. Atlantic colonies did not necessarily have higher levels of concentration, although they were more sensitive to changes in colonial policy. Moreover, access to the Atlantic implied reduced trade costs to the United States and Western Europe during an unprecedented period of economic growth.

The principal contributions of this paper are twofold. By including series at constant prices for many peripheral countries that previously had been excluded, we provide the first comparative view of African, Asian, and American export growth during the post-war period. We also present the first long-run view of the degree of concentration of exports in the metropolitan market prior to and following political independence. Besides stating the facts of export growth and colonial export concentration during the post-war period, we identify an example of, in Everett and Venables' (2002: 4) words, "how geography and history combine to determine - at least in part - the extent to which developing economies have participated in this latest wave of international market integration." We show that the reduction of the metropolitan monopsony was conditioned by both coloniser nationality, and thus the legacy of colonial policy, and geographical attributes: the importance of the Atlantic economy, which, a century earlier, had taken centre stage in the theatre of the first globalisation.

CRediT authorship contribution statement

Christopher David Absell: Methodology, Formal analysis, Writing – original draft, Writing – review & editing. **Giovanni Federico:** Conceptualization, Methodology, Formal analysis, Writing – original draft, Writing – review & editing. **Antonio Tena-Junguito:** Conceptualization, Methodology, Formal analysis, Writing – original draft, Writing – review & editing.





Fig. 8. Share of destinations in total exports of countries that decolonised during the period 1950-90: [A] Atlantic access, [B] no Atlantic access. Sources: As per Fig. 2.

Data availability

Data will be made available on request.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.strueco.2023.11.002.

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