Trade Shocks, Mass Mobilization and Decolonization: Evidence from India's Independence Struggle

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Abstract

A key challenge for development lies in generating broad coalitions in favor of reforms that span economic and ethnic divisions. The mobilization of India's remarkably diverse population in favour of independence—one of the first mass political movements and the first major reversal of colonization by Europeans since the early 19th century—provides an important historical example of a success. Using novel data, we find evidence that districts that were negatively impacted by the Great Depression and Britain's policy shift from free trade to an imperial preference regime favoring British manufactures were more likely to support the Congress, the party of independence, in 1937 and 1946 and more likely to engage in violent insurrection in the Quit India rebellion of 1942. However, positive and extreme negative shocks in this period were associated with less, rather than more, support for Independence. We interpret our results as inconsistent with a "peasant rebellion" interpretation of India's independence and instead as reflecting the role of the Great Depression in aligning the incentives of South Asia's exporters with import substituters in favour of political independence, even while Imperial protectionism forged new pro-Empire constituencies.

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Introduction

India is a geographical term. It is no more a united nation than the Equator.

— Sir Winston Churchill, March 18, 1931

India's successful struggle for independence from Britain marked the first major reversal of a process of global colonization and market integration by Europeans that had been continuing since the early nineteenth century. Beyond its historical importance, not only for South Asia but as an example for future civil rights and independence movements elsewhere, India's independence struggle also poses a number of intriguing puzzles for social science. Surprisingly, both for contemporary observers like Winston Churchill and students interested in collective action, India's independence struggle emerged as one of the world's first mass political movements, spanning both rich and poor as well mobilizing supporters across much of India's remarkable ethnolinguistic diversity. Surprising from the perspective of trade theory, the platform of the main party of Independence, the Congress, was avowedly autarkic, and yet still proved broadly popular even though India was (and remains) labour-abundant and capital-scarce, conditions that classic trade theory and cross-country evidence suggests should favour political support for free trade (Stolper and Samuelson, 1941, O'Rourke and Taylor, 2006, López-Córdova and Meissner, 2008). This is still more remarkable because in its last two decades, India's independence struggle had become, to an important extent, a struggle over control over India's trade and foreign policy. By 1937, ten years before Independence, India's first broadly representative provincial legislatures had already acquired substantial local autonomy, with the British retaining control over foreign policy and overseas trade. Yet the years to come were to see continued mass mobilization, often at high risk, by both rich and poor in favour of seizing these remaining imperial rights, with the avowed aim of Purna Swaraj—"complete independence." A large coalition of Indians chose not to take the path of self-governing dominion within the empire offered by the British, a path trod

¹The essential intuition is that because free trade allows the flow of capital goods into the country, this should raise the value of labour, and because labour votes, labour should prefer free trade.

by Australia and Canada, with its accompanying ease of access to within-empire trade and immigration.²

How and why then did a broad coalition of Indians form across ethnolinguistic and economic lines to push for democratic government and national independence? This paper provides the first systematic empirical evidence on the determinants of the Indian independence movement, using a range of hitherto untapped district-level data sources. We analyze data on crop-growing patterns, agricultural yields, employment in import and export crops and manufactures, election turnout, Congress Party votes, Congress Party membership, and secret reports on insurrection during the "Great Rebellion" of 1942 against British rule. Our analysis shows that trade shocks caused by the Great Depression that led to the abandonment of free trade and the establishment of imperial preferences in tariffs shaped domestic Indian constituencies for and against independence from the British Empire. Using a panel of world prices and district-specific production figures, we test whether Great Depression-induced negative price shocks helped generate support for (or reduced opposition to) independence. We find evidence that districts that were negatively impacted by the Great Depression and the shift from free trade to an imperial preference regime favoring British manufactures were more likely to support the Congress, the party of independence, and more likely to engage in violent insurrection in the Quit India rebellion of 1942. However, extreme negative (and positive) shocks in this period were associated with less, rather than more, support for Independence. We interpret these results as reflecting, on one hand, the coordination challenges faced by the extreme poor in choosing to support the opposition and, on the other, the forging of new pro-empire constituencies due to the newly-established protectionist system of imperial trade.

This work is a part of a two-part project that establishes the role of trade in India's pol-

²The importance of trade and foreign policy to India's independence struggle may seem remarkable to modern observers: prior to the reforms in the 1990s, India was seen as a classic closed economy. Yet, these policies themselves were the post-Independence implementation of national policies by the Congress party, itself an anomaly for a democratically elected government in a labour-abundant state (O'Rourke and Taylor, 2006, López-Córdova and Meissner, 2008).

Depression in India, to explain two critical changes in the Independence movement—its demands, which switched from limited home rule to "Purna Swaraj" or complete independence, and its support base, which expanded from elites to encompass the masses. Arguably, had both these changes not occurred, India would probably have achieved a less complete independence—of the type that the dominions of Canada and Australia had achieved—considerably later. Our paper advances both the historical literature on India's independence and the social science literatures on decolonization, nationalism and economic voting. We also speculate on how our work might explain the roots of economic policy making in the post-Independence period.

By examining the links between the Great Depression and nationalist mobilization in India, this work furthers several literatures in history and the social sciences. Consider first the histories of India's independence movement. Its two major strands emphasize either the metropole's reasons for granting India independence (see, e.g., the *Transfer of Power* series published by the U.K. government—Mansergh (1976)), or provide thick description of the micro-politics of the movement in India (see the *Towards Freedom* series published by the Indian Council for Historical Research—Gupta, ed (2010), Prasad, ed (2008), Panikkar, ed (2009), Gupta and Dev, eds (2010)). These literatures, respectively, mention the Great Depression as a factor weakening Britain's will to rule India, and as a cause of a "peasant movement" in the inter-war years which, in turn, merged with the broader independence movement Rothermund (1992, 2006). Our contribution lies in using systematic data and subnational variation to test the latter claim.

We also further the social science literatures on decolonization, democratization, nationalism and economic voting. In the first three of these cases, we break new ground by being the first to use sub-national variation—rather than cross-country variation. While the questions we can address using sub-national data are naturally narrower than possible with the immense institutional variation of a cross-country study, our focus on South Asia, which

includes data on districts that would form the three future countries of India, Pakistan and Bangladesh, allows us to shed light on an environment that housed one-fifth of the world's population that is less subject to reverse causality and confounds, while still encapsulating remarkable political and socioeconomic diversity. We briefly summarize our contributions to these literatures below.

First, and in contrast to the existing literature on decolonization, which explains it in terms of the metropole's interests (Lustick, 1993), the inevitable growth of nationalism (Brubaker, 1996), the obstruction of demands for representation (Lawrence, 2007), state weakness (Lawrence, 2007), changes in international norms (Hailey, 1943), or the destruction wrought by World War II (Clayton, 1994), we show how India's independence was substantially driven by economic concerns. India's masses, rather than behaving as emotional nationalists, had economic reasons to be rid of the Raj. India is a particularly good case with which to study the drivers of decolonization since, being the first major decolonization since the aftermath of the Napoleonic Wars in Latin America, its decolonization could not have been subject to spillover effects from elsewhere.³

Second, India's decolonization was accompanied by democratization as well, and our work relates to this literature too. While prominent theories in this literature argue for the key role played by modernization (Lipset, 1960), class configurations (Moore, 1966) and inequality (Boix, 2003, Acemoglu and Robinson, 2005) in explaining democratization, these variables cannot explain the precise timing of world-over democratization, and, in the case of India, make the country a puzzle for scholars. A newer and smaller literature attempts to explain the effects of the international system on the fact, and in some instances the timing, of democratization, arguing that variation in world trade volumes (Ahlquist and Wibbels, 2010), the metropole's proportion of trade with a colony (Bonfatti, 2010), or natural openness to trade (Eichengreen and Leblang, 2008, López-Córdova and Meissner, 2008) explain democratization. Our paper furthers and connects these literatures by examining the effect

³India's independence, on the hand, is often said to have inspired other anti-colonial movements (Rothermund, 2006).

of trade shocks on India's democratization, including through its effect on reducing inequality across the country.

Third, our work also furthers the literature on the emergence of nationalism. While prominent strands of this literature have emphasized the rise of print journalism (Anderson, 1983) and uneven modernization (Gellner, 1983), a common theme is that nationalism, when it occurs, tends to be concentrated within ethnically homogeneous or homogenizing units. Such explanations fail to explain India's remarkable mass mobilization across ethnic and social lines, particularly in an environment of low literacy. Our account instead has much in common with Gourevitch (1979)'s argument that nationalism arises when the economic and political centers do not coincide. By tracing the emergence of nationalism to district-specific shocks due to the depression, however, our account underlines how nationalism can even vary across space when there is a general disjuncture between political and economic centers.

Lastly, by arguing that economic shocks caused political mobilization, our work joins a venerable scholarship that demonstrates the tendency of the electorate to rely on retrospective assessments of incumbents when voting and engaging in other political activities (Fiorina, 1981). By examining the effects of the Great Depression on three very different types of political mobilization—party membership, voting and protests—our paper is also one of the few to test the idea that different types of political mobilization can have the same root causes (McAdam, Tarrow and Tilly, 2001).

We start by outlining our alternative account of the Indian Independence movement. The next section details the unique data and empirical strategy that we rely on. We then present our results, and conclude.

An account of the Indian independence movement

The leading organization of the Indian independence movement—the Indian National Congress—was founded in 1885, soon after the British abolished most import duties in India. For

much of its pre-Independence history, the movement was dominated and financed by rich professionals—particularly lawyers and businessmen—who made their living from India's triangular trade with Britain and China. These elites pushed for greater self-government within the British Empire. In a separate paper, we intend to trace the effect of trade on the birth and initial growth of this movement. In this paper, we estimate the impact of trade shocks on the dramatic transformation of the movement in securing India her independence.

We start our account in the early-1920s, when the Independence movement still was—despite its recent expansion under Gandhi, who had returned a hero from South Africa in 1915—largely a narrow, elite-led one, occasionally derided as a "talking shop." By 1935, the movement had transformed itself into a mass movement aiming for complete independence. The transformation was so substantial that independence appeared eminently achievable by the end of the decade, and was only delayed due to World War II. We concern ourselves with describing this transformation.

The reasons for the broad-basing and change in aim of the Indian independence movement were many, but most historical accounts highlight two factors—the impact of the Indian National Congress's strategic campaigns, particularly under Gandhi's leadership, and the great economic tumult of the inter-war period, which reached its nadir in the Great Depression.⁴ We focus on the latter, partly because Gandhi's efforts were explicitly conditioned on economic factors, and were therefore endogenous to the economic situation.

The 1920s were tumultuous for the world economy, and its boom and busts severely tested the world. Until that time, Britain's stewardship of Indian trade policy had brought with it an openness to trade that India would not see again at least until the 1990s. Yet, 1923 was perhaps the last "business as usual" year under the free trade regime that India had become accustomed to as a colony of the United Kingdom (Appleyard, 1968, 2006). A series of questionable policies followed, beginning with the United Kingdom's return to the gold standard at pre-war (and now, overvalued) levels in 1925. This was followed by a

⁴Metcalf and Metcalf (2002), which barely discusses the economic dimension, is perhaps an exception.

remarkable contraction of world trade during the Great Depression, which started in 1929. Both affected practically every sector of the Indian economy, the country's relationship with Britain and the rest of the world, and, as we will show, the dynamics of the independence movement as well. An indication of the economic tumult of the time comes from the the total value of imports into the United Kingdom from British India: these nearly halved from £67 million in 1923 to £37 million in 1931 (see also Figure 1).

The negative effect of the Great Depression was exacerbated by the Raj's external-sector responses, which reflected Britain's economic and security imperatives more than India's needs. The first of these responses had to do with exchange rate. Britain abandoned the gold standard in September 1931, effectively devaluing the pound, while at the same insisting that the rupee remain pegged to it at its existing high value.⁵ This allowed Britain to reflate its economy—a policy that practically all the world followed—at the expense of India's economy. British exports to India were favored over India's exports to the world, and a massive outflow of gold from the country and to Britain followed. Existing deflationary pressures due to the collapse in demand due to the Great Depression were, in effect, exacerbated by the Empire's exchange rate policy.

The second external-sector response to the Great Depression was an abandoning of free trade. The 1931 "Ottawa Agreement" established "imperial preferences" between Britain and her colonies. The Empire would operate as a preferential-trade zone, with the high tariffs to non-members, and preferential ones for members. The agreement offered the British the cover with which to extract low Indian import duties for 160 of its manufactures, while agreeing to similar terms for a smaller number of Indian raw material exports (Rothermund, 1992)(p.147). While the former created opposition to Empire, the latter created—as we detail below—new supporters of Empire.

British policy led to the segmentation of India's populace into at least three distinct groups, each of which reacted to the regime in different ways and for different reasons.

⁵This stands in contrast to the devaluations that the dominions of Australia and New Zealand were able to pursue.

We consider each of these in turn, detailing how their interests were affected by the Great Depression, the overvaluation of the rupee, and the Ottawa agreement. The first group were India's "protected exporters," who received preferential access to British markets under the terms of the Ottawa agreement. This group mainly exported the commodities of tea, coffee and tobacco, grown perhaps not coincidentally mainly on British-owned plantations. The second group were India's "unprotected exporters," which included the bulk of the population. This group included the producers of staples such as wheat and rice. This constituency suffered greatly under the Great Depression, due to the fall in the demand for their products, which was exacerbated by Britain's decision to keep the rupee overvalued. The Congress party, as non-incumbents. will have looked attractive to this latter group. The last—and perhaps the most important consequential group affected by Great Depression were the owners of India's infant industries. These "import substituters," we argue, resented Britain's control of India's external policy, both because of the overvalued exchange rate that resulted from it, and because of the Ottawa agreement, which instituted preferential tariffs on manufactures from Britain. Both policies will have increased competition for these infant industries, and it was in this group's interest to gain control over India's trade policy. The only way to do so was, in fact, to sue for complete independence. Indeed, it was as the Great Depression struck, on January 26th 1930-thenceforth celebrated as Independence Day- that Congress abruptly changed its platform from self-government within the British empire to Purna Swaraj.⁶

Many have pointed out that economic dislocation is oftentimes associated with political participation, partially for expressive reasons, but also for instrumental reasons, as people wish to do something to better their situation. Indeed negative economic shocks have been seen as an instigator of peasant rebellion in India (Rothermund, 1992) and increased social conflict more generally (Dal Bo and Dal Bo, 2004, Miguel, Satyanath and Sergenti, 2004,

⁶Celebrations of India's "Independence Day" would continue until 1947. Lord Mountbatten chose instead August 15th as this was the anniversary of his greatest triumph— the surrender of Japan. Later January 26th was rehabilitated as India's Republic Day.

e.g.). Yet, we will provide evidence that the historical literature mistakenly conflates mobilization and support for Independence, as measured by support for the Congress party. Districts that were worst hit by the Great Depression, while being more politically active, were actually less likely to support the Congress. We interpret these results as reflecting the coordination dilemma faced by the poor (Kuran, 1991). While it may make collective sense to protest the Raj, doing so could prove very costly at the individual level. This difference between collective and individual rationality was exacerbated in this context, since the peasantry had the most to lose from picking the "wrong side" in the fight between the Raj and the Congress. Furthermore, Congress' autarkic platform too did not make it the natural choice for labour.

The argument that all political mobilization in the 1930s was not for the Congress is unusual in Indian historiography. This is partly because there has been little systematic quantitative analysis of pre-independence era mobilizations. Evidence for our claims can, however, be seen in some aspects of the historical record. Explaining how the alliance crafted in the fire of the depression came to be born, Bose and Jalal (1998) argues the Congress was practically "pushed, by the pressures which the colonial state's economic policies were generating from below, into taking positions they might otherwise have wanted to resist" (140).⁷ The Congress could either ride the wave of economic disaffection that confronted it, or be subsumed by it. Although the Congress chose to ride the wave of disaffection, and this changed its subsequent demands, which now included both sops for agriculturalists and industry, the alliance between the elite (mainly import-substituters) and non-elites (mainly

⁷Rothermund (2006) discusses the forging of another coalition, between socialists and industrialists, that also helped fashion the independence movement and the country's post-1947 economic policies. He notes that "debates on British currency policy added to an increasing awareness among Indian industrialists that nationalism was their best bet. Import substitution behind tariff walls guaranteed by a national government was the ideal which they pursued. In this way socialists like Jawaharlal Nehru and Indian capitalists were able to find a common denominator. Both preferred a national interventionist state to a pseudo-liberal colonial state" (259).

⁸Bose and Jalal (1998) note that "Five of Gandhi's eleven demands ... related to economic issues. His call for the abolition of the salt tax and a reduction of the land-revenue demand by half were designed for India' peasant masses. On behalf of India industrial bourgeoisie Gandhi demanded protection for the indigenous textile industry, reservations of coastal shipping for Indians ..., and a reduction of the rupee-pound exchange rate .. to stimulate Indian exports" (149).

unprotected exporters) remained fragile.

This was, as pointed out previously, because there was a substantial disjuncture between the interests of import substituters and unprotected exporters. While the first of these favored protection from imports, the latter will have preferred, per Stolper-Samuelson, a free trade regime so as to benefit from capital inflows (O'Rourke and Taylor, 2006, Stolper and Samuelson, 1941). This disjuncture might also explain a recurring puzzle of India's pre-independence politics, where Gandhi—sometimes with, and at other times without the Congress's backing—would call off their agitations against the wishes of the movement's rank and file. As Bose and Jalal (1998) note, the Congress was so uneasy with this alliance, that the "the Gandhian Congress [was] ready to press the brakes, fearful of people running ahead of the leadership and redefining the organization's cherished goal of Swaraj" (140). The disjuncture in interests widened as the depression played out, and the new protectionist policies of the imperial preference system favored some over others. The uneven performance of these constituencies pitted them against one another. We will provide evidence consistent with the emergence of new pro-Raj constituencies among the beneficiaries of the imperial preference regime.

Data and empirical strategy

We seek to measure the effect of trade shocks due to the Great Depression and the institution of British protectionist "imperial preferences" on support or opposition to the Indian National Congress, the main party of the Indian independence movement. The ideal comparison would be to compare two districts with same levels of initial exposure to foreign trade during the free trade regime of the 1920s, one of which received protection under "imperial preferences" during the Great Depression, and one that did not. A third comparison category are those districts which did not produce goods for export under free trade, and whose producers were relatively insulated from the costs and benefits of imperial preferences.

Our benchmark specification will be cross-sectional regressions of the following form:

$$M_{1936,d} = \gamma_1 \bar{V}^d_{1920-23} + \gamma_2 S^d_{1923-1933} + X'\zeta + \epsilon_d \tag{1}$$

where M are measures of mobilization, \bar{V}^d is the average value of export goods per worker in a district between 1920 and 1923, S is the percentage shock to the value of export goods per person in a district due to the Great Depression and the imperial preference regime, X are controls including provincial fixed effects, ϵ_d are unobserved factors that may drive mobilization that we assume to be independent between provinces but allow to be arbitrarily correlated (clustered) within them, and d indexes administrative districts, which is the level for our analysis.

We employ four new measures of colonial era mobilization in our analysis. One of these—turnout during the 1937 elections—is a measure of overall mobilization. The other three—Congress party support in the 1937 provincial elections, violent and non-violent political activities during the Quit India "rebellion" of 1942, and Congress party membership in 1946—are measures of support for the Congress party. The Congress Party membership data were taken from the organization's membership handbook; 1937 election data were taken from the official election returns, and the Quit India data were drawn from a series of secret intelligence reports written by the British (please see the Data Appendix).

The initial value of export goods per worker in a district is calculated as follows:

$$\bar{V}^{\bar{d}}_{1920-23} = \sum_{g} \frac{\bar{V}_{g,1920-23} \times w_g^d}{W_g^T}$$
 (2)

where $\bar{V}_{g,1920-23}$ provides the average c.i.f. value of British India exports to the UK in 1920-23, g indexes all goods exported to the United Kingdom from British India appearing in the Annual Statements of Foreign Trade of the United Kingdom for the relevant year, and d indexes districts. w_g^d are those that work in the production of the good g in district d in 1931, while W_g^T is the total number of workers producing that good over all districts. Thus the

number of workers producing a good acts as a district-specific weight to changes in demand for that good: those areas where relatively more workers are employed will be more affected by changes in value.⁹

We then calculate the percentage shock to the value of export goods per person in a district due to the Great Depression and the imperial preference regime:

$$S_{1923-1933}^{d} = \frac{\bar{V}^{d}_{1930-34} - \bar{V}^{d}_{1920-23}}{\bar{V}^{d}_{1920-23}} \times 100$$
 (3)

We use as our measure the change in the value of exports rather than just the world or UK prices as this enables us to capture the changing export mix of goods in response to world demand and the tariff regime, as well as giving us a measure that is intuitive: it is the change in the average revenue product per worker in each district. V^d can be broken down into its component sectors (manufacturing, cash crops, staple crops, natural resources etc) by doing the analogous calculation over the goods and producers in those sectors. The Appendix provides details of which goods are assigned to which sector.

Our identification strategy rests on the assumption that the value (i.e. equilibrium price and aggregate quantities) of UK imports from India are driven mainly by the fluctuations in the pound, changes in world demand, and the broad tariff regime set in the Ottawa agreement in 1931 favoring British manufactures, rather than by political mobilization by individuals or groups within specific Indian districts.

The identification of the effects of the great depression is particularly plausible given that we do not use district-specific price measures to construct our shock measures. We instead use c.i.f. import prices for various goods multiplied by district-specific production to construct our shock measure. As a result of our shock construction strategy, the variation in the district-specific shock measure is not driven by district or province-specific mitigation measures. In a sense, our strategy is similar to a instrumental variable strategy. Instead

⁹That we are using initial employment is an attractive feature of this measure, since it means that the measure is exogenous to the depression-induced shifts in employment.

¹⁰In future work, we will also do parallel calculations only using the price shocks.

of using our exogenous measure of shocks to "instrument" for district-specific shocks, the precise magnitudes of which are unknown, we use the "instrument" directly in our estimation strategy.

While we lack panel data, the fact that we use three independent measures of mobilization to support our argument should increase confidence in our results. Our regressions also employ provincial fixed effects, and therefore only leverage intra-provincial district variation in mobilization. We employ a number of additional district-specific controls for our analysis. These vary depending on the specific dependent variable considered, and are mentioned below, as we present the results of our analysis.

Our key dependent, independent and control variables are summarized in Table 1. While the average district in British India produced export goods worth around Rs. 1.1 per worker in 1923, by 1933, the average Indian district suffered a 47.4% drop in the value of export goods produced there, reflecting the general collapse of prices during the depression. Importantly for our discussion, this mean value masks great variation: approximately 1/3 of the India's districts experienced net positive shocks during the depression, as the combination of imperial preferences and the world demand rose for a few commodities, such as cinchona and myrobalans (for drugs), iron and steel, tin ore, oilseeds and oilnuts, spices and tobacco (Figures 2 and 3.)

Evidence

Figure 5 presents the raw relationship between export shocks until 1933 and the degree of turnout in the 1937 elections. Separate local polynomial smooths are applied both above and below a zero shock, i.e. for the winner and the loser districts from the Great Depression and the imperial preference regime. Notice that the figure appears, at first, to confirm the perspective of historians that the Great Depression led to mobilization by a 'peasantry' pushed to protest and rebel by the extreme negative shocks of the Depression and imperial

policy. The residents of districts that suffered greater negative shocks to the value of their export goods appears to be somewhat more likely to turnout in the elections.

However, Figure 6 suggests that this account is incomplete. The Figure presents the relationship between export shocks until 1933 and the vote share of the Congress party in the 1937 elections. Notice that the shock data are bimodally-distributed above and below zero. Further, there is a negative concave relationship between the export shock and the Congress Party vote share, with support for Congress attaining a maximum (of around a 60% vote share) with a negative shock to the value of export goods in the district of around 30%. In contrast, districts that suffered greater negative shocks were actually less likely to support the Congress. There is also a sharp drop off in support for Congress among the "winners" from the imperial preference regime, as the positive shock rises.

These patterns suggest that mobilization of the worst hit by the Depression was not coordinated into support for the opposition. Instead of being a rebellion of those facing the hardest times, support for Congress came from intermediate districts that were relatively insulated from the Depression shock. Further, the introduction of imperial preferences appears to have led to a new constituency of beneficiaries from imperial preferences who subsequently also voted against the Congress.

We will next show that these differences are robust. Consider first the analysis of the effects of the depression on the 1937 elections. Table 2 presents an analysis of the determinants of voter turnout during these elections, and Table 3 presents the results of voter support for the Congress party. The dependent variables are presented as a %, of the total eligible votes, and total votes polled, respectively. All regressions control for provincial fixed effects, and employ standard errors clustered at the provincial level.

Table 2 examines the determinants of percentage of eligible voters turning out to vote during the 1937 elections. Notice first that, consistent with Figure 5 there is a weak, non-robust negative relationship between the export shock and turnout (1-5), which once again may appear at first to confirm the "Peasant Rebellion" view of the Great Depression and

the mass movement for Independence. However beneficiaries from the export shock are also somewhat more likely to turnout (columns 4-5, 6-7). Other factors that appear to influence turnout are the land tenure system, with voters in districts with more owner-cultivators and landless laborers much less likely to turn out to go to the polls (columns 3, 5, 6).

Table 3 suggests, however, that this weakly increased mobilization in adversely affected districts did not actually manifest itself in greater votes for the party of rebellion and independence, the Congress.¹¹ Notice first that, consistent with the raw data in Figure 6, there is a robust inverted-U relationship between the export shock and the Congress vote share, implying that support for Congress was maximised in districts which lost around 40% of the value of their goods during the Depression (Cols 1-8). The partial residual plot for the regression in column 7, displayed in Figure ??, is consistent with this analysis. This result is robust to removing outlier exporter districts (column 2), controlling for the extent of employment in manufacturing, different types of land tenure, army recruitment and police presence (columns 3, 4, 6) and for the extent of initial exports by sector (columns 4, 6, 8). The result is also robust to controlling for the extent of turnout in the elections, which actually has a negative effect on the vote share of Congress (columns 5-10).

Thus the accounts of historians that conflate mobilization with support for independence may be missing an important piece of the puzzle. Those districts adversely affected by the Depression did appear to mobilize more, however this mobilization did not appear to favor Congress. Columns 7-10 explore the effect on Congress vote share of a positive trade shock, parametrising this first as an interaction (columns 7, 8) and next by decomposing the export shock in gains and losses (columns 9, 10).¹² Notice that, again consistent with

¹¹The official election report for the 1937 election, tabled in Britain's House of Commons, only notes the votes received by winner and runner up candidates and their partisan affiliation. The Congress vote received variable is calculated from this, and is therefore properly defined as the % of the votes received by the Congress party in districts where there was at least one constituency where the party was the winner or runner-up. This is an underestimate of the true Congress vote share, since it excludes the votes received by Congress candidates if they were not in the top two candidates. We drop the 18 districts where no Congress candidate was the winner or runner-up.

 $^{^{12}}$ The gain (loss) is calculated as: 0 if the shock is negative (positive) and the value of the shock otherwise. Thus: shock = qains - loss

Figure 6, those districts that experienced the most gains from the Great Depression and the system of imperial preferences, and thus the inter-dependence with the United Kingdom, were significantly less likely to vote for the party of decolonization and independence.

While various measures of land tenure do not appear to be major determinants of support for Congress in the 1937 elections, perhaps because of the limited franchise, the proportion of males employed in industry does appear to have had a robust positive effect. This is consistent with the Congress platform that would have favored protection for industry against the UK manufactures that received preferential treatment under the imperial preference system.¹³

Table 4 examines the extent to which the change in interests due to the Great Depression and the institution of imperial preferences persisted until the eve of Independence, using data on primary party membership by district published by the All-India Congress Committee in 1946. Notice that there are similar patterns to the 1937 elections—the most adversely affected districts from the Great Depression, and those that gained from imperial preferences, were both less likely to field paid-up party members (columns 6-10). By 1946, Congress membership was greatest in districts that suffered around 20-30% losses to the value of their exports. Congress membership was more prevalent in areas that had land tenure systems that favored rentiers (non-cultivating landlords or tenants) and more landless labourers (see also Figure 4).

A third measure of support for Congress can be found during the Quit India movement, also known as the 'Great Rebellion' or the August *Kranti*, a violent uprising that took place during 1942. Our Quit India dependent variable is a (log transformed) count of the number of events—violent/non-violent, Gandhian/non-Gandhian etc.—listed in the British administration's "Secret Reports" as having occurred in each district during the Quit India struggle. Quit India activity is a particularly condign measure for our analysis for two

¹³Further, the interaction between measure of males in industry and the export shock is also negative, suggesting that industrialized districts that were adversely affected by the shock were more likely to support Congress (results not shown).

reasons. First, the national Congress party leadership was detained the very day the action started. And second, the country's district administration practically collapsed in some parts of the country. Both factors meant that the political activity that did occur at the time was mostly spontaneous, unmediated by national leadership or British efforts to restore order. As of this writing, we only have the data for the province of Bombay and Madras, and so the results are even more preliminary than is the case otherwise.

However, as Table 5 reveals, the results, though based upon only two provinces, are however, consistent with our overall story. Both large negative and large positive shocks from the Great Depression appear to reduce mobilization in favor of Independence.¹⁴

Discussion and conclusions

We have argued that the Indian independence movement's aims and dynamics were shaped by the unfolding of a large economic shock—that of the Great Depression—as it coursed through India. In the first large-n analysis of the subnational variation in overall and pro-Congress mobilization, we have shown that the regions of India that experienced the largest negative shocks were—in keeping with the received wisdom—somewhat more likely to turnout in India's first large-scale (provincial) elections of 1937. This result appears fragile when subject to statistical tests, however. Furthermore, and completely contrary to the received wisdom, being subject to the Great Depression is associated with decreased support for the Congress in terms of votes received, membership and activity during the large-scale "Quit India" or Congress mobilization of 1942. By conflating mobilization with support for the Congress party, the historical literature has missed this story.

The one-third of the country that experienced positive price movements due to a combination of the Great Depression and the colonial government's imperial preference tariff

¹⁴We, of course, have an ecological inference problem. While we have shown that districts that are subject to greater shocks experienced less mobilization, we have not shown that the people who stayed home during the independence era mobilizations were truly the ones most affected either positively or negatively by the Depression. There is an important need for additional qualitative evidence to clarify this mechanism.

system behaved in a decidedly different way. Those who benefited from the new Imperial preference regime both turned out and supported the Congress less. Together, this meant that Congress support was the greatest amongst those who were moderately—but still substantially—negatively affected by the depression. Gainers and extreme losers were loath to support the Congress, even as extreme losers turned to vote in somewhat greater numbers.

Although the Congress did well in the elections of 1937—the party formed majority governments in five of the eleven provinces, and coalition governments in two additional provinces—and went on to win India her independence, our results nuance current historiography. Those areas that were most affected by the depression and imperial preferences supported the Congress the least. Rather, it was districts that experienced some losses, but were still relatively insulated from changes in world demand and India's trading regime, where Congress support proved to be the greatest.

There are two possible explanations for our results. The first of these is straightforward, and has to do with voters interests. While India's masses were disaffected by the Raj's external sector policies, the Congress party's incipient platform—which emphasized self-reliance or autarky—was bad for the poor, since it didn't allow India to make use of its comparative abundance in unskilled labor. This, however, was more the case in hindsight. We may also interpret our results in light of existing theories on voting and revolutions. Those who experienced large negative shocks will have been less likely to turnout since voting is costly, and this all the more so for the poor. People in districts hit hard by the depression will also have been less likely to vote for the Congress Party, since such a choice will have been subject to coordination dilemmas (Kuran, 1991, Lohmann, 1994) endemic to revolutionary moments. While voting for the Congress might have been in people's collective interest, the potential for large-scale individual level defection will have made such voting behavior individually irrational. Such coordination dilemmas are rarely overcome, and when they are overcome it is often through seemingly-random events such as the self-immolation

of a Tunisian street-vendor that sparked that country's revolution in December 2010. The Great Depression—devastating as it was—might have unfolded too slowly to play such a decisive role.¹⁵

The Great Depression has been largely seen as a non-event in prominent studies of Indian economic history, with scholars arguing that the aggregate changes to growth were small. Our paper, however, points to the fact that the political economic effects of the Great Depression were surprisingly substantial, in that they helped precipitate decolonization. There are likely to have been further lasting political economy effects as well, and we conclude by briefly suggesting two of these, both of which deserve further study. First, that the Great Depression caused a compression in India's income distribution—a new fact uncovered by our data—indicates the possibility that India might have been able to democratize at this juncture because the potential costs of democratization (in terms of future expected redistribution) will have been substantially reduced. Second, since a number of scholars have shown that founding elections set the patterns for subsequent political competition (Lipset and Rokkan, 1967, Wittenberg, 2006), it is possible that the Great Depression affected the country's political economy for decades to come. The economic study of the founding years of the modern subcontinent is likely to yield a rich harvest. ¹⁶

¹⁵In future iterations of this paper, we intend to see if our results hold if we use price, rather than value, shocks. As of this writing, the shock data are for 1923-33, although are dependent variables are observed in 1936-37 (the election years), 1942 (the year of the Quit India movement) and 1946 (the year in which Congress Party membership was observed). In the next version of the paper, we intend to construct shock measures that run until the years in which our dependent variables are observed.

¹⁶This research agenda would amount to a Beardian retelling of India's history, in that it examines the political economy behind the country's founding, much as Charles Beard's work did for American history (Beard, 1913).

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Data Appendix

We detail the construction of our key dependent and independent variables here.

1937 election data

For each of British India's 1,046 constituencies, we entered data on the following fields from the official election returns (Secretary of State for India to Parliament 1937): total votes polled, votes polled and party affiliation for the winning candidate, the size of the electorate, the total number of candidates that ran for office, the number of the seats (while 82% of constituencies were single-member seats, the rest had 2-4 members), and a variable indicating the type of constituency (general, general-urban, general-rural, reserved for scheduled castes, Muslims, Sikhs, Christian, Anglo-Indians, and some other small categories).

To collapse these data to the district level, we first mapped each constituency to an administrative district or districts using the 1935 delimitation report (Secretary of State for India to Parliament 1936). In the 12% of instances where constituencies spanned districts, we divided the variables evenly between the districts. We then summed the variables across the 199 districts of British India.

1942 Quit India data

These data are based on a series of secret reports written by the administration in response to the Quit India agitations (Government of Bengal 1943, Government of Bengal 1944, Government of Bihar 1944, Government of India 1943a-h, Government of Madras 1943, Government of the United Provinces 1943). The reports provide detailed (often daily) accounts of Quit India-related events. The Quit India dependent variable that we employ is the (log-transformed) count of the following events, between August and December 1942: violence, property damage, strikes, meetings, civil disobedience activities, and resignations.

1946 Congress primary membership data

These were obtained from a Congress Party handbook (All India Congress Committee 1946). Primary party members were required to pay an annual membership fee of four annas (equivalent to one-fourth of a rupee) a year. This entitled them to vote in party elections if they had maintained membership for a year. Data are divided by 100,000 and log-transformed.

Trade and shock data

TBD.

Data sources

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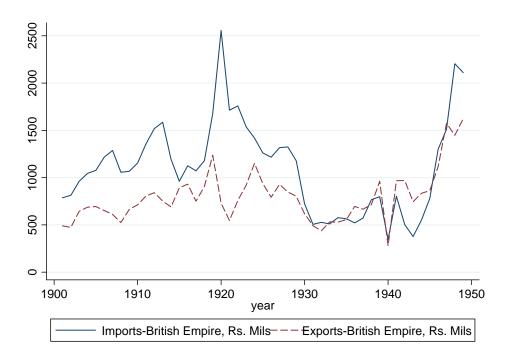
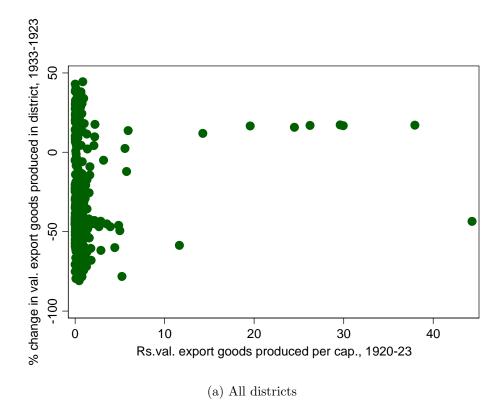
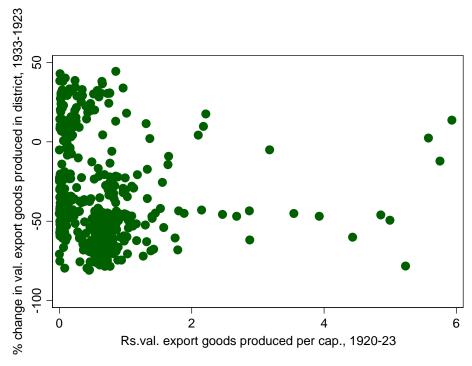


Figure 1: India's trade with the British Empire

Source: Mitchell: Historical Statistics



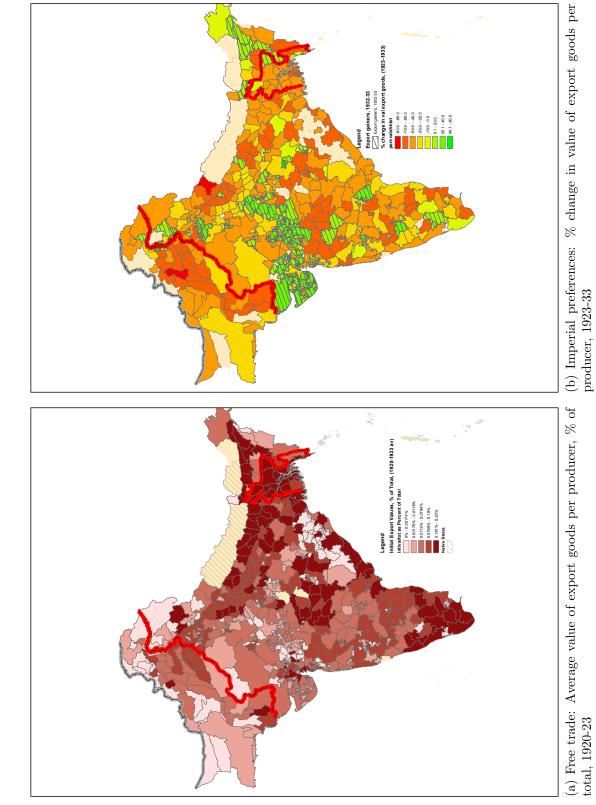


(b) Excluding districts with initial export goods >Rs.10 in value per capita

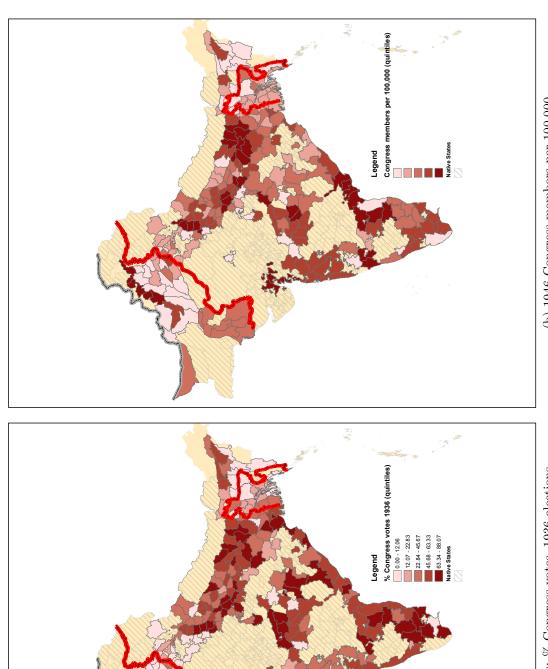
Figure 2: Initial exports and Depression shocks

Source: Own calculations, based upon $Annual\ Statements$ of $Foreign\ Trade$ of the $United\ Kingdom$ and various Censuses of India

26



Source: Own calculations, based upon the 1931 census, 1931 agricultural census and various editions of the Annual Statement of Foreign Trade of the Figure 3: Winners and Losers from Imperial Preferences and the Great Depression United Kingdom



(a) 1936 elections: % Congress votes, 1936 elections

(b) 1946 Congress members per 100,000

Source: Own calculations, based upon official election returns and the Congress Party membership handbook 1946 Figure 4: Support for Congress prior to Independence

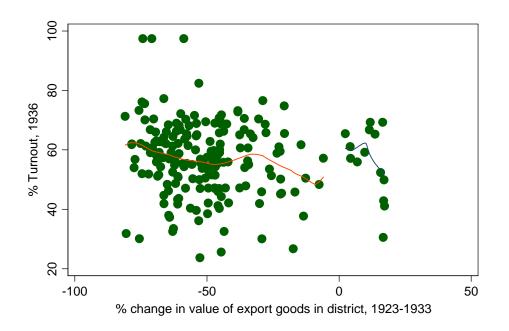


Figure 5: Export shocks and % Turnout, 1937 elections
Local polynomial smooths

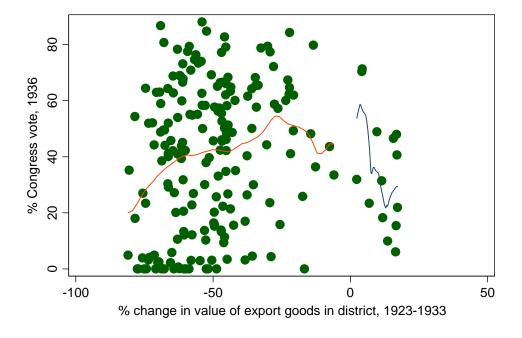


Figure 6: Export shocks and % votes for Congress, 1937 Local polynomial smooths

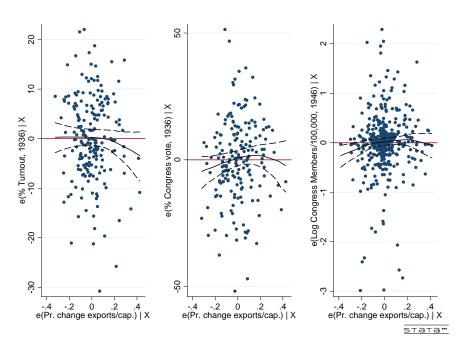


Figure 7: Partial residual plots

Table 1: Summary Statistics

				Mea	n
Variable	Obs	Mean	Std. Dev.	Losers	Gainers
All India					
Congress membership per 100,000	459	9.7	16.4	12.6	2.9 ***
Log. Congress membership per 100,000, 1946	459	1.3	1.5	1.7	0.4 ***
Quit India event count	20	72.1	44.0	66.1	125.5
Value export goods per worker, 1923	459	1.1	3.9	0.8	1.6
Value export goods per worker- manufactures, 1923	459	0.2	0.3	0.2	0.2
Value export goods per worker- natural resources, 1923	459	0.2	2.3	0.3	0.0 **
Value export goods per worker- cash crops, 1923	459	0.6	3.3	0.2	1.5 **
Value export goods per worker- staple crops, 1923	459	0.1	0.3	0.1	0.0 ***
% change value export goods per capita, 1923-33	419	-32.0	32.6	-47.3	20.7 ***
% gains: value export goods per capita, 1923-1933	419	4.6	10.0	0.0	20.7 ***
% losses: value export goods per capita, 1923-1933	419	36.7	24.9	47.3	0.0 ***
Gainer in value of export goods	472	0.3	0.5	0.0	1.0
Log. Population, 1931	459	6.2	1.6	6.4	5.7 ***
Population density, 100,000s/sqkm	446	0.3	2.1	0.2	0.7
% Males in manufacturing industries, 1931	417	2.5	1.7	2.6	2.3
% Males in agriculture, 1931	417	17.4	7.3	18.1	15.1 ***
% Male non-cultivating landlords or tenants, 1931	417	0.5	0.7	0.5	0.4 **
% Males owner-cultivators, 1931	417	5.3	5.5	5.6	4.6
% Males unlanded agricultural labourers, 1931	417	3.7	3.7	4.0	2.5 ***
Armymen per 100,000, 1931	417	1.5	6.2	1.8	0.7 **
Police per 100,000, 1931	417	1.9	3.1	1.9	1.9
Proportion Muslim	459	0.2	0.3	0.2	0.2 ***
British India					
Turnout, % of eligible voters	204	56.7	12.5	57.1	52.2
Congress vote, % of votes	188	43.7	23.8	44.2	39.3
Number of candidates	204	16.4	9.7	16.3	18.0
Number of seats	204	6.1	3.4	6.1	6.7
Registered voters, 10,000s	204	13.5	10.1	13.7	11.5
Congress membership per 100,000	203	19.1	18.6	19.5	15.2
Log. Congress membership per 100,000, 1946	203	2.6	1.0	2.6	2.3
Quit India event count	20	72.1	44.0	66.1	125.5
Value export goods per worker, 1923	203	1.9	4.9	0.9	11.8 ***
Value export goods per worker- manufactures, 1923	203	0.3	0.3	0.3	0.3
Value export goods per worker- natural resources, 1923	203	0.2	1.5	0.3	0.0 *
Value export goods per worker- cash crops, 1923	203	1.2	4.9	0.3	11.4 ***
Value export goods per worker- staple crops, 1923	203	0.2	0.2	0.2	0.0 ***
% change value export goods per capita, 1923-33	201	-47.4	22.5	-51.8	11.8 ***
% gains: value export goods per capita, 1923-1933	201	0.8	3.3	0.0	11.8 ***
% losses: value export goods per capita, 1923-1933	201	48.2	20.4	51.8	0.0 ***
Gainer in value of export goods	204	0.1	0.3	0.0	1.0
Log. Population, 1931	203	6.9	0.7	6.9	6.7
Population density, 100,000s/sqkm	202	0.4	2.9	0.2	3.0
% Males in manufacturing industries, 1931	200	2.7	1.7	2.8	1.6 ***
% Males in agriculture, 1931	200	19.3	4.3	19.1	21.6 *
% Male non-cultivating landlords or tenants, 1931	200	0.5	0.4	0.5	0.4
% Males owner-cultivators, 1931	200	6.1	5.0	5.9	8.5
% Males unlanded agricultural labourers, 1931	200	4.5	3.3	4.7	1.9 ***
Armymen per 100,000, 1931	200	0.8	2.4	0.8	0.3
Police per 100,000, 1931	200	1.5	1.2	1.5	1.1 **
Proportion Muslim	203	0.2	0.3	0.2	0.2
r topotuon wusum	203	0.2	0.3	0.2	0.2

Notes: *** p<0.01, ** p<0.05, * p<0.1 using two-sided difference in means Welch t-tests. Sources: Author's calculations. See text for details.

Table 2: Regression: % Turnout, 1937 elections

OLS with Native State / Province Fixed Effects	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	British	Trimming	British	British	British	British	British
	India	Exports	India	India	India	India	India
Value export goods per worker, 1923	-0.516***	-1.656*	-0.608***	-0.604**	-0.432***	-0.679***	-0.658***
	[0.119]	[0.836]	[0.134]	[0.215]	[0.139]	[0.152]	[0.113]
Prop. change value export goods per capita	-4.871	-9.391	-3.900	-34.493*	-28.406*		
	[7.343]	[7.173]	[6.697]	[15.870]	[14.050]		
Prop. change value export goods per capita^2	-2.010	-7.216	-2.277	-30.954*	-25.741*		
	[8.532]	[8.595]	[7.400]	[16.762]	[12.047]		
Gainer in value of export goods				10.171	15.392**		
				[6.058]	[6.232]		
Gainer x % change in value				0.295	-0.584		
				[0.618]	[0.567]		
% Gains: value export goods per cap., 1923-1933						0.274	0.041
						[0.252]	[0.227]
% Losses: value export goods per cap., 1923-1933						0.047	0.024
						[0.051]	[0.055]
% Males in manufacturing industries, 1931			-0.584		-0.640		-0.569
			[0.721]		[0.728]		[0.719]
% Males in agriculture, 1931			0.380		0.351		0.383
			[0.337]		[0.329]		[0.337]
% Male non-cultivating landlords or tenants, 1931			1.620		1.585		1.689
			[2.157]		[2.028]		[2.105]
% Males owner-cultivators, 1931			-0.828*		-0.883**		-0.828*
			[0.398]		[0.389]		[0.397]
% Males unlanded agricultural labourers, 1931			-0.544*		-0.502*		-0.543*
100,000,1001			[0.259]		[0.257]		[0.266]
Armymen per 100,000, 1931			-0.383		-0.364		-0.383
D. I			[0.442]		[0.479]		[0.438]
Police per 100,000, 1931			-0.104		-0.009		-0.078
December 1 and 1 and			[0.835]		[0.844]		[0.847]
Proportion Muslim			1.161		1.960		0.935
Electoral controls	Y	Y	[3.849] Y	Y	[3.435] Y	Y	[3.632] Y
Electoral controls	_			_	_	-	-
Observations P. squared	199 0.45	191 0.44	199 0.50	199 0.46	199 0.51	199 0.45	199 0.50
R-squared	0.43	0.44	0.30	0.40	0.51	0.43	0.30

Robust standard errors in brackets, clustered at the Native State/ Province level. * significant at 10%; ** 5%; *** 1%; All regressions include controls for log. population 1931, population density.++: Electorate controls include: No of Candidates, No of Seats, No of Registered voters. Districts with 1923 export values per capita of Rs 10 are dropped in Col 2.

Table 3: Regression: % Congress Vote Share, 1937

OLS with Native State/ Province Fixed Effects	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)
	British	British Trimming	British	British	British	British	British	British	British	British
	India	Exports	India	India	India	India	India	India	India	India
Value export goods per worker, 1923	0.617*	-0.634	0.096	0.096-16.228***	0.537 - 1	0.537 -15.704***	1.170***-15.361***	15.361***	1.087*** .14.873***	4.873***
	[0.307]	[2.383]				[3.278]	[0.221]	[3.423]	[0.309]	[2.880]
Prop. change value export goods per capita	.54.487***	-36.107*	-41.884*	-41.936** - [77.372]	-54.492***	-42.576**	-53.923*	-39.808		
Prop. change value export goods per capita^2	.70.705***	-54.737**	-35.862		[067:4I] -70.766***	-51.571*	-68.661*	.34.881] -47.901		
	[14.740]	[21.569]	[25.219]		[16.929]	[25.144]	[33.006]	[42.755]		
Gainer in value of export goods							18.501	18.407		
							[12.491]	[16.264]		
Gainer A % change in value							-2.169" [1.111]	[1.648]		
% Gains: value export goods per cap., 1923-1933								•	-2.366***	-1.892***
										[0.512]
% Losses: value export goods per cap., 1923-1933									-0.113	-0.06
									[0.111]	[0.000]
% Turnout					-0.367**	-0.312	-0.383**	-0.341	-0.351**	-0.307
				; ; ;	[0.137]	[0.204]	[0.138]	[0.213]	[0.140]	[0.204]
% Males in manufacturing industries, 1931			4.433*	2.76/*		2.690*		2.715*		2.77.
			[2.449]	[1.391]		[1.385]		[1.409]		[1.365]
% Males in agriculture, 1931			0.761	0.818		0.891		0.992		1.032
			[0.738]	[0.650]		[0.647]		[0.6/1]		[0.634]
% Male non-cultivating landlords or tenants, 1931			2.112	3.444		3.69		3.962		4.136
			[7.592]	[3.452]		[3.582]		[3.513]		[3.518]
% Males owner-cultivators, 1931			-0.46	-0.428		-0.592		-0.795		5///
% Wales unlanded acricultural labourers 1931			-0.344	[0.716] -0.361		-0.479		[0.626] -0 535		-0.587
			[0.923]	[0.994]		[1.025]		[1.025]		[1.116]
Armymen per 100,000, 1931			-0.838	-0.33		-0.679		-0.755		-0.646
			[0.524]	[0.722]		[0.728]		[0.768]		[0.754]
Police per 100,000, 1931			3.312*	1.14		1.116		1.389		1.156
			[1.601]	[1.557]		[1.709]		[1.673]		[1.633]
Proportion Muslim			-27.63	-30.15		-26.905		-25.433		-27.674
			[20.454]	[17.872]		[20.252]		[20.758]		[18.891]
% Export shock implying maximum Congress support	-0.385	-0.330	-0.578	-0.420	-0.385	-0.413	-0.393	-0.416		
Controls for initial value by sector+	Z	Z	Z	Y	Z	Y	Z	Y	Z	Y
Electorate controls++	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	183	175	183	183	183	183	183	183	183	183
R-squared	0.52	0.53	0.58	09.0	0.54	0.61	0.54	0.62	0.54	0.61

Robust standard errors in brackets, clustered at the Native State/ Province level. * significant at 10%; ** 5%; *** 1%; All regressions include controls for log. population 1931, population density +: sectors include: Manufactures, Natural resources, Cash crops and Staple crops, 1920-23. ++: Electorate controls include: No of Candidates, No of Seats, No of Registered voters. Districts with 1923 export values per capita of Rs 10 are dropped in Col 2.

Table 4: Regression: Log. Primary Congress Members, 1946

OLS with Native State/ Province Fixed Effects	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)
	Full sample	Dropping Trimming Ahmad. exports		Dropping Ahmad.	Dropping Ahmad.	Full sample	Full sample	Dropping Ahmad.	Full	Dropping Ahmad.
Value export goods per worker, 1923	0.023	0.023	0.058	0.025*	-0.025	0.019	0.021	-0.022	0.020	-0.021
Prop. change value export goods per capita	[0.010] -0.439**	[0.010] -0.426**	-0.458**	-0.399**	[0.029] -0.416**	[0.010] -2.282**		1.957***	[0.017]	[0.020]
Prop. change value export goods per capita^2	[0.187]	[0.190]	[0.186]	[0.189]	[0.177]	[0.875]	[0.868]	[0.720] -2.761***		
		[0.392]	[0.394]	[0.320]	[0.323]			[0.866]		
Gainer in value of export goods						0.172	0.173 [0.175]	0.127 $[0.195]$		
Gainer x % change in value						0.035**	0.033**	0.029**		
% Gains: value export goods per cap., 1923-1933						[10:0]	[610:0]	710.0	-0.008**	-0.007**
									[0.004]	[0.003]
% Losses: value export goods per cap., 1923-1933									-0.004	-0.002
				0	0			7	[0.003]	[0.003]
% Males in manufacturing industries, 1931				0.07	0.0/8			0.076		0.0/9
1001				[0.048]	[0.059]			[0.060]		[0.064]
% Males in agriculture, 1931				-0.00/	-0.007			-0.009		-0.008
% Male non-cultivating landlords or tenants 1931				0.04**	0.010]			0.010]		0.010]
				[0.047]	[0.043]			[0.043]		[0.046]
% Males owner-cultivators, 1931				0.011	0.012			0.013		0.009
				[0.014]	[0.013]			[0.014]		[0.013]
% Males unlanded agricultural labourers, 1931				0.023**	0.024**			0.027**		0.025**
				[0.011]	[0.012]			[0.012]		[0.012]
Armymen per 100,000, 1931				-0.001	-0.001			-0.001		-0.002
1501 000 001				[0.003]	[0.003]			[cnn:n]		[0.003]
Police per 100,000, 1931				-0.041**	-0.041**			-0.038*		-0.042**
Proportion Muslim				-0.235	-0.214			-0.162		-0.298
•				[0.545]	[0.546]			[0.503]		[0.605]
% Export shock implying maximum Congress support	-0.188	-0.195	-0.196	-0.202	-0.199	-0.351	-0.394	-0.354		
Controls for initial value by sector+	Z	Z	Z	Z	Y	Z	Z	Y	Z	Y
Observations	405	404	396	404	404	417	405	404	417	404
R-squared	0.82	0.83	0.83	0.83	0.83	0.83	0.83	0.84	0.82	0.83
				201	411				•	,

Robust standard errors in brackets, clustered at the Native State/ Province level. * significant at 10%; ** 5%; *** 1%; All regressions include controls for log. population 1931 and population density. +: sectors include: Manufactures, Natural resources, Cash crops and Staple crops, 1920-23. Ahmadabad- as location of Gandhi's ashram at Sabarmati was a Congress headquarters, so was an outlier in membership. Districts with 1923 export values per capita of Rs 10 are dropped in Col 4.

Table 5: Regression: Incidents in the Quit India Rebellion, 1942 (Madras and Bombay subsample)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(1)	(-)	(5)	(.)	-ve	-ve	-ve	-ve
					binomial,	binomial,	binomial,	binomial,
					incidence	incidence	incidence	incidence
	OLS	OLS	OLS	OLS	ratios	ratios	ratios	ratios
Rs. val. export goods per wkr, 1920-23	-0.039	-0.193	0.235	0.020	0.982	0.977	1.212	1.035
	[0.088]	[0.949]	[0.215]	[0.098]	[0.37]	[0.46]	[1.20]	[0.72]
% gains to value of export goods per cap., 1923	-0.055	-0.006	-0.050	-0.058	0.919	0.917	0.928	0.930
	[0.099]	[0.104]	[0.097]	[0.102]	[1.20]	[1.24]	[1.05]	[1.41]
% losses to value of export goods per cap., 192	-0.011**	-0.008	-0.009*	-0.009*	0.988**	0.988**	0.990**	0.991**
	[0.005]	[0.005]	[0.005]	[0.005]	[2.47]	[2.41]	[2.22]	[2.49]
Log. Population, 1931	-0.059	-0.095	-0.110	0.020		0.937	0.903	1.019
	[0.172]	[0.186]	[0.173]	[0.180]		[0.32]	[0.47]	[0.12]
Population density, 100,000s/sqkm	-0.332	0.049	-0.420	0.959		1.039	0.984	3.997
	[1.176]	[1.295]	[1.163]	[1.569]		[0.03]	[0.01]	[0.97]
% Males in manufacturing industries, 1931				0.031				1.011
				[0.128]				[0.10]
% Males in agriculture, 1931				0.027				1.029
				[0.041]				[0.94]
% Male non-cultivating landlords, 1931				0.540*				1.819**
				[0.280]				[2.27]
Armymen per 100,000, 1931				-0.003				0.973
				[0.108]				[0.32]
Police per 100,000, 1931				0.087				1.164
				[0.246]				[0.66]
Proportion Muslim				1.170				2.437
				[1.722]				[0.80]
Controls for initial value by sector+	N	Y	N	N	N	N	N	N
Native State / Province FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	43	43	42	43	44	43	42	43
R-squared	0.16	0.25	0.16	0.32				

Robust standard errors in brackets, * significant at 10%; ** significant at 5%; *** significant at 1%