Security, Trade, and Political Violence*

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Abstract

To address security concerns, governments often implement trade barriers and restrictions on the movement of goods and people. This paper studies the conditions under which these policies can backfire, and increase threats to security. Trade barriers generate negative externalities on targeted economies, decreasing the opportunity cost and increasing the supply of political violence. To test this hypothesis, we exploit the restrictions imposed by Israel on imports to the West Bank as a quasi-experiment. In 2008 Israel started imposing severe restrictions to the import of selected *dual-use* goods and materials, *de facto* banning a number of production inputs from entering the West Bank. We show that after 2008 (i) output and wages decrease in those manufacturing sectors that use those materials more intensively as production inputs, (ii) wages decrease in those localities where employment is more concentrated in these sectors, and (iii) episodes of political violence are more likely to occur in these localities. Our calculations suggest that the dual-use list policy accounts for 13% of the violent political events occurred in the West Bank in 1999-2014.

Keywords: security, trade, political violence, Palestine.

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1 Introduction

Security concerns are of paramount importance for countries and their sovereignty. Responding to a growing demand for safety, governments implement a large variety of domestic and foreign policies. These security measures are typically very costly. Between 2000 and 2010, U.S. taxpayers spent $90 billion on securing the U.S.-Mexico border.[1] At the same time, the wars in Afghanistan and Iraq have cost U.S. taxpayers $1.6 trillion.[2] Confronted with these numbers, countries are increasingly relying on trade restrictions as tools to address security concerns in a cost-effective way.[3] For example, since the "Black Hawk Down" incident in 1993 that brought an end to a military intervention, the U.S. has continuously banned exports of arms and any related material to Somalia and imports of charcoal from Somalia.[4] Similarly, China recently issued a lengthy list of dual-use products and technologies banned from exports to North Korea, fearing their possible use in building weapons of mass destruction.[5] This type of trade restrictions are all but uncommon. Indeed, every major power regulates dual-use items, imposing barriers on their mobility across countries.

While the security argument behind these trade restrictions is straightforward, their implementation may not be. Trade barriers negatively affect the economy and its efficiency (Ethier 1982; Melitz 2003). By reducing average income, trade restrictions can reduce the opportunity cost of engaging in political violence, and increase the supply of conflict (Collier and Hoeffler 1998, 2004; Deininger 2003; Fearon and Laitin 2003; Barron et al. 2004; Miguel et al. 2004; Brückner and Ciccone 2010; Do and Iyer 2010; Dube and Vargas 2013; Bazzi and Blattman 2014; Blattman and Annan 2016). As a result, security-motivated trade policies may backfire, and *increase* threats to security. The extent to which this happens will depend on the interaction between the nature of the implemented restrictions and the production structure of the affected economies.

In this paper, we ask whether and how security-motivated trade restrictions can fuel political violence. To answer this question, we exploit the restrictions imposed by Israel on imports to the West Bank as a quasi-experiment. For security reasons, in 2008 Israel

[1] https://www.usimmigration.com/cost-benefits-border-security.html [consulted on May 24, 2016].

[2] http://time.com/3651697/afghanistan-war-cost/ [consulted on May 24, 2016].

[3] As Haass (1998) notes, economic restrictions "provide a visible and less expensive alternative to military intervention and to doing nothing. The document is available at http://www.brookings.edu/research/papers/1998/06/sanctions-haass [consulted on May 24, 2016].

[4] https://www.treasury.gov/resource-center/sanctions/Programs/Documents/somalia.pdf [consulted on May 25, 2016].

[5] http://www.ft.com/cms/s/0/2db21280-2515-11e3-bcf7-00144feab7de.html#axzz49Zsrijna [consulted on May 24, 2016].

issued a list of dual-use goods and materials subject to severe import restrictions, *de facto* banning a number of production inputs from entering the West Bank. We frame the issuance of such list as an exogenous shock to economic conditions, and provide three sets of results. First, we use information pertaining to more than 30,000 establishments in the years 1999 to 2012, and show that output and wages decrease differentially after 2008 in those manufacturing sectors that use dual-use materials more intensively as production inputs. Second, we exploit spatial variation in the concentration of employment in these sectors, and track the evolution of labor market outcomes at the locality level. Using Labor Force Survey data, we show that local labor market conditions worsen differentially in those localities where a higher share of workers is employed in dual-use input intensive industries. Finally, we link worsening labor market conditions to the evolution of political violence in 1999 through 2014. We use geo-referenced information on episodes of political violence to show that these are differentially more likely to occur after 2008 in those same West Bank localities where economic activity is highly dependent on dual-use materials as inputs.

To identify these effects of the policy, we implement a difference-in-difference strategy in reduced form. We derive our measures of intensity in dual-use inputs and employment concentration using the US input-output matrix and employment data from 1997 respectively, and compare the evolution of economic and political outcomes over time across sectors and localities according to these baseline measures. To validate our identification strategy, we implement this same empirical analysis using observations on sectors and localities in the Gaza Strip. The latter was since 2007 under an Israeli-imposed full embargo. Therefore, we expect the dual-use list to have no effect on the economy and political violence in the Gaza Strip. Results from this *placebo* test show that we cannot reject this hypothesis, validating further our identification approach.

Our results provide evidence of a causal path from the issuance of the dual-use list to political violence. We provide direct evidence of the mechanism behind this relationship, which materializes through the negative externalities of the list on industrial production and local labor markets. To the best of our knowledge, we are the first to show and quantify both the economic and political costs of security measures. According to our estimates, the dual-use list policy accounts for a 1.3% loss in the total value of industrial output and for 13% of all events of political violence that occurred in the West Bank in the period 1999-2014. Our study highlights the trade-offs and interlinkages between security and economic considerations, showing the need of an integrated policy approach.

This paper speaks to different streams of research. First, we contribute to the vast literature on the relationship between trade and conflict (Mansfield 1994; Oneal et al. 1996; Gartzke 1998; Mansfield and Pevehouse 2000; Gartzke et al. 2001; Oneal and Russett 2001; Martin et al. 2008a,b). While this burgeoning literature has produced an important empirical effort to determine whether economic interdependence and conflict are correlated, previous studies have not paid sufficient attention to the causal mechanisms at play. Our paper provides a close examination of the micro-foundations linking barriers to trade and political violence. To our knowledge, we are the first to document the negative externalities of security-motivated trade restrictions and to analyze the conditions under which they may increase threats to security.

Second, our paper contributes to the vast literature exploring the effect of economic conditions on political violence. While several theoretical models link the state of the economy to political violence (Bueno de Mesquita 2005, 2008; Rosendorff and Sandler 2010), the large majority of the empirical literature finds weak or no correlation between poverty and terrorism (Russell and Miller 1983; Taylor 1988; Hudson 1999; Berrebi 2003; Atran 2003; Li and Schaub 2004; Krueger and Malecková 2003; Krueger and Laitin 2008). Relying on an exogenous economic shock allows us to demonstrate that these studies might have underestimated the impact of the opportunity cost on engaging in conflict, a result in line with Benmelech et al. (2012).

In studying the economic impact of the dual-use list, our results provide additional evidence of the positive relationship between access to foreign intermediate inputs and firm productivity and performance (Schor 2004; Amiti and Konings 2007; Kasahara and Rodrigue 2008; Kugler and Verhoogen 2009; Topalova and Khandelwal 2011; Boehm et al. 2015; De Loecker et al. 2016). We also show that the negative effect of the dual-use list is heterogeneous across local labor markets. Focusing on the US and trade with China, Autor et al. (2013, 2016) show that labor market conditions worsened differentially in those areas where local employment is more exposed to foreign import competition. Our findings reveal that limiting access to foreign inputs has corresponding heterogeneous effects. Indeed, labor market conditions worsen differentially in those areas where employment is highly dependent on restricted inputs.

To conclude, our paper also speaks to the literature on economic sanctions and their effectiveness. While seminal studies argue that economic sanctions are not effective policy instruments (Tsebelis 1990; Pape 1997, 1998), later contributions have claimed that sanctions can influence targets' behavior under identifiable conditions, e.g. endorsement from an international institution or when senders and targets do not antic-

ipate frequent future conflicts (Drury 1998; Drezner 1999, 2000; Navin et al. 2013). Our findings point out important unintended consequences and negative externalities produced by economic sanctions. Indeed, we show that import restrictions increase the probability of political violence in the section of the Palestinian population that are negatively affected by the economic sanctions imposed by the Israeli government.

The remainder of the paper proceeds as follows. The next section provides background information on the Israeli-Palestinian conflict. Section 3 presents a simple conceptual framework linking economic conditions to political violence. Section 4 describes the data. Section 5 explains the empirical strategy, while Section 6 reports the results of the empirical analysis. Section 7 concludes.

2 Political and Economic Context

The Israeli-Palestinian conflict In 1967, the Six-Day War ended with the Israeli occupation of the West Bank and the Gaza Strip, previously part of Jordan and Egypt respectively. The Israeli occupation continued for thirty years, leading to an increasing tension between the two parties. In 1987 these tensions erupted into an unarmed but violent and widespread Palestinian uprising. The so-called First Intifada ended in 1993, when the Oslo Accord created the Palestinian National Authority (PNA). The PNA was given the control over some domestic civilian matters (e.g. education, health and taxation). At the same time, Israel maintained control over strategic issues such as security, border controls and foreign trade between the Occupied Palestinian Territory (OPT) and Israel, Jordan and Egypt. The Oslo Accord was followed by period of significant reduction in the number of violent episodes and also an increase in the degree of economic integration between Israel and the OPT. This process ended in September 2000 with the beginning of the so-called Second Intifada. The Second Intifada (also called the Al-Aqsa Intifada) has been a period of significant violence between the occupying Israeli Defense Forces (IDF) and the Palestinians, including Palestinian attacks in Israel and in the OPT, targeted assassination of Palestinians leaders in the OPT, demolition of Palestinian houses by the IDF, and IDF killings of Palestinians militants and civilians. In order to enhance security and control in the OPT during the Second Intifada, the IDF also increased the intensity of the restrictions on the mobility of goods and people within the OPT as well as across borders with Israel, Jordan and Egypt.

While there is no established end date for the Second Intifada, violence decreased substantially after 2006. The 2006 elections caused a de facto division of OPT into a

Fatah-controlled West Bank and a Hamas-controlled Gaza Strip. After Hamas victory at the elections, Israel imposed a complete blockade on the Gaza Strip in 2007. Israel instead continued the occupation of the West Bank. Since then, the West Bank and the Gaza Strip have started to diverge in economic and political terms (Etkes and Zimring 2015).

Economic (inter)dependence and the dual-use list The performance of the OPT economy has always been strictly dependent upon the Israeli economy. Even after the Second Intifada, Israel has remained the main trade partner of the OPT, with around 70% of Palestinian imports coming from Israel. Also, almost 15% of Palestinian workers commute daily to jobs in Israel. Indeed, the very functioning of the OPT has depended on Israeli political and military decisions. Israel controls several crucial aspects of the Palestinian economy from the collection of import duties to the issue of building permits.[6] Given this strict dependence, it is not surprising that security and military actions taken by Israel have had a large impact on the OPT economy. Previous studies have shown that security measures put in place by the IDF (such as border closures, internal mobility restrictions, increased controls for Palestinian imports and export at ports and borders) as well as the intensity of conflict have negative economic effects for the OPT (Calí and Miaari 2013; Di Maio and Nandi 2013; Amodio and Di Maio 2016; PALTRADE 2010).

Among these security-motivated measures adopted by the Israeli government, the imposition of the dual-use list on Palestinians firms is of particular importance. Dual-use goods are goods, services or technologies that can be used for both civilian and military applications and/or can contribute to the proliferation of Weapons of Mass Destruction (WMD). The trade of dual-use items is subject to controls to prevent the risks that these items may pose for international security. The controls derive from international obligations (in particular, UN Security Council Resolution 1540, the Chemical Weapons Convention and the Biological Weapons Convention) and are in line with commitments agreed upon in multilateral export control regimes.[7] Internationally, the control of the export, transit and brokering of dual-use items is a key instrument contributing to international peace and security and it is regulated by several international treaties.[8] As such, export of dual-use items is not prohibited in principle, but is subject

[6]The fact that Israel collects tax and customs revenues for the Palestinian Authority (PA) gives Israel significant political leverage since such revenues constitute 60% of the total PA budget.

[7]http://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/ [consulted on May 15, 2016].

[8]Several treaties regulate the export of dual-use goods and technologies used to manufacture them:

to restrictive controls, generally in the form of a required licence.

As part of the new Defence Export Control Law, an official dual-use list was approved by Israeli Ministry of Defence and entered into force on December 31, 2007.[9] The list includes 56 items.[10] The entry of the materials included in the dual-use list is strictly monitored by the Trade and Industry Department of the Civil Administration (TIDCA). The control system requires Palestinian importers to obtain a license in order to import items included in the dual-use list.[11] The license application process must be repeated for every truckload of a dual-use item, even for the same category of imports. The average time to receive a license is a minimum of four weeks, up to eight weeks, and each license lasts 21 days (TIDCA 2012). It follows that, while a formal authorization to import dual-use items can be obtained, the process is extremely burdensome and slow implying that, in effect, the goods are banned (ARIJ 2010).[12]

The number of goods included in the Israeli dual-use list for the West Bank and Gaza is unusually extensive as compared to that in the internationally agreed one (World Bank 2013).[13] The list includes, inter alia, chemicals, fertilizers, raw materials for industry, steel pipes, lathe and milling machines, optical equipment and navigation aides. Anecdotal evidence indicates that most Palestinian industries are affected by the dual-use list, especially food and beverages, pharmaceuticals, textiles, information technology, agriculture and metal processing (World Bank 2013). While rigorous empirical evidence is lacking, these restrictions are expected to raise the cost of inputs, thus forcing

the Wassenaar Arrangement (of which Israel is not officially part), The Australia Group, The Nuclear Suppliers Group, and the The Missile Technology Control Regime (MTCR).

[9]The Defense Export Control Law, 5766-2007, was passed on October 2007. Israeli-imposed restrictions on import of some specific products in the OPT have been in place for decades, even before the Second Intifada, but type of restrictions varied across products and depended on the specific security situation. More importantly for us, there were already some cases of banning of inputs in 2007 (PALTRADE 2010).

[10]See the Appendix for the full list of items. The list is excerpted from the Defense Export Control Order 2008 (Controlled Dual-Use Equipment Transferred to Areas under the Palestinian Authority Jurisdiction), last updated on 2 August, 2009. Minor amendments were made to this list between 2009 and 2012.

[11]Some other items are officially banned from import to both the West Bank and the Gaza Strip, such as the aforementioned glycerine and lathe machines (PALTRADE 2010).

[12]The Trade Facilitation Project (World Bank) identifies a number of key problems that severely restrict the authorization process: 1) the list and scope of restricted dual-use goods has been increasing despite an environment of improved security; 2) lack of specificity regarding the items causes uncertainty and confusion; 3) no easy access to information on what are considered dual-use goods; 4) military orders do not explain the application process or establish timelines for processing applications, taking decisions and resolving disputes; 5) the Exceptions Committee meets infrequently and with unclear timelines and there is limited staff at the Israeli civil administration to process applications.

[13]It should also be noted that in all other countries the dual-use list regulates export activities and is directed to domestic firms. In the case of the OPT, it is instead imposed by Israel as a form of import restriction motivated by internal security reasons.

Palestinian businesses to use inefficient input mixes and affecting productivity and firm survival PALTRADE (2010).

A few examples help illustrating the negative impact of the dual-use list on the manufacturing sector. National Aluminum and Profile Company (NAPCO), located in Nablus, is a leading industrial aluminum firm. Before the dual-use list was issued, NAPCO was exporting about ten truckloads of aluminum to Israel on a monthly basis.[14] Due to the trade restrictions imposed on imports of industrial inputs essential for aluminum anodizing (oxidizations) and nitration, NAPCO was forced to make the required processing steps in Israel. As a result, it faced large extra costs per shipment.[15] To compensate for these extra costs of transportation and processing, NAPCO was under pressure to either reduce its output or to reduce labor costs, i.e. cutting down wages.

Similarly, Pal Karm Company for Cosmetics, which is also located in Nablus, is a leading industrial cosmetics firms. The company both sells products in the local market and exports to Israel. Around 50-60% of the company's sales were going to the Israeli market before the *de facto* banning. The company trades mostly cosmetics and skincare products, and Glycerin - which is used in cosmetics to hold moisture against the skin and prevent dryness - is an essential input for the company. Since the issuance of the dual-use list, which includes Glycerine, Pal Karm has not able to sell skincare products in the Israeli market because the Israeli Health Authorities require Glycerin to be part of such products. Between 2008 and 2010 the company estimated a 30% drop in exports of Glycerine-based products to Israel.

3 Conceptual Framework

What is the relationship between the issuance of the dual-use list and individuals' willingness to engage in political violence? In choosing whether or not to engage in political violence, individuals weight and equate the marginal benefit and cost of doing so. Negative economic shocks affect individuals' payoff and their decisions.

First, negative economic shocks decrease the opportunity cost for individuals of engaging in political violence (Becker 1968; Grossman 1991; Bueno de Mesquita 2005,

[14]The following two cases are taken from "The economic costs of the Israeli occupation for the occupied Palestinian territory" a bulletin published by the Palestinian Ministry of National Economy in cooperation with the Applied Research Institute Jerusalem (ARIJ) in 2011.

[15]Extra costs of every 400 kg of shipment are estimated at NIS 25,800, for aluminum anodizing, and NIS 6,464 for nitration.

2008; Rosendorff and Sandler 2010). Participating in conflicts comes always at a cost. One component of these costs is given by the probability of being arrested multiplied by the loss associated to the corresponding punishment. Another component is made of opportunity costs. Individuals engaging in political violence give up earning opportunities in the formal economy. Therefore, each individual will decide to engage in political violence as long as the payoff from doing so is higher than the one she would receive upon entering the labor market. It immediately follows that a drop in wages increases the likelihood that any given individual engages in political violence.

Second, negative economic shocks alter the perceived benefits of violence. This is a standard grievance story (Azam and Hoeffler 2002; Kalyvas 2006; Collier and Hoeffler 2004; Valentino et al. 2004; Lyall et al. 2013). According to this argument, individuals experience the negative impact of the dual-use list on their own income and, more generally, see negative economic consequences on their community. For instance, the *de facto* banning affects the whole community through a decline in firms output. As a result of this reduction in welfare, individuals develop strong grievances against the Israeli government and thus see greater value in the (perceived) benefits of using violence to fight this government than they would in the absence of negative economic shocks.

There are key differences between these two mechanisms. While the opportunity cost argument is relevant for participation in political violence in general, the grievance argument pertains to violent acts against Israel in particular. For instance, if the opportunity cost argument holds, we should see an increase in political violence also against Palestinian civilians and the Palestinian government. On the contrary, if the grievance argument holds, we should see an increase in political violence specifically against Israeli civilians and the Israeli government. Moreover, if the grievance argument holds, we should see long-lasting effects of negative economic shocks on political violence, even when the economy goes back to its equilibrium. Conversely, if the opportunity cost argument holds, differences in political violence between low-intensity localities and high intensity localities should vanish once negative economic shocks are absorbed by the market.

Aside from these differences, a reduction of the opportunity costs of engaging in political violence and an increase in the benefits of engaging in political violence lead to an increase in the supply side of political violence. In sum, our simple theoretical framework generates a straightforward testable hypothesis: a decrease in wages increases the individual likelihood of engaging in political violence and the proportion of the population willing to take action.

4 Data and Measurement

Firms In our empirical analysis, we combine several different data sources. In the first part of the analysis, we study the impact of the dual-use list on the manufacturing sector in the OPT. For this purpose, we rely on the information provided in the Industry Survey. This is a yearly survey of a representative sample of Palestinian establishments in the manufacturing sector, designed and administered by the Palestinian Central Bureau of Statistics. Our sample counts 33,000 establishments surveyed in both West Bank and the Gaza Strip over the years 1999 to 2012. A new sample of establishments is drawn every year, preventing us from following the same firms over time. Nonetheless, the data provide information on the ISIC 4-digit sector of economic activity to which each establishment belongs.[16] We are thus able to aggregate the establishment-level data at the 4-digit sector and track the evolution of output, prices, and wages in each sector over time. Our final sample contains information on more than 100 manufacturing sectors over the years 1999 to 2012.

A crucial component of our empirical analysis is a measure capturing the extent to which each manufacturing sector relies on dual-use inputs in production. In order to rule out any concern about endogeneity, we take the US economy as the benchmark, and compute such dual-use input intensity measure using the information available from the Bureau of Economic Analysis (BEA). The combination of firm-level and input data allow us to generalize the aforementioned examples of NAPCO and Pal Karm.

We start by identifying, for each product in the dual-use list, its corresponding 10-digit Foreign Trade Harmonized (HS) code. This is the most precise product-level classification available in trade, allowing us to identify almost every item in the dual-use list as a separate 10-digit product. As a second step, we use BEA correspondence table and link the HS codes to the 2002 Input-Output Commodity (IO) codes. We can then use the Input-Output matrix, and calculate for each commodity i its intensity in dual-use inputs as

$$d_i = \sum_j \frac{b_j \, v_j}{v_j} \tag{1}$$

where v_j is the value of input j that is directly and indirectly required to deliver a dollar of the commodity i to final users, while b_j is an indicator equal to one if any of the dual list items belongs to the input j commodity code. d_i is equal to the fraction of dual-use inputs used to deliver one dollar unit of commodity i: the higher is the value of dual-use

[16] This information is not available for the year 2011, so we do not include establishments surveyed in that year in our final sample.

inputs in production, the higher is d_i.

We then assign 4-digit codes to each commodity i, and finally calculate the intensity in dual-use inputs for sector s by taking the average of d_i within each 4-digit sector s, meaning

$$m_s = \frac{1}{n_s} \sum_{i \in s} d_{is} \tag{2}$$

where n_s is the number of commodities i delivered by sector s. The value of m_s is between 0 and 1 by construction. Table 2 shows a list of the bottom and top 10 sectors according to our measure of dual-use input intensity.

Local Labor Markets We expect the dual-use list to affect more those sectors that are more intensive in dual-use inputs, as captured by m_s. If this is the case, we also expect the list to have a heterogeneous impact across localities depending on their sectoral composition. We therefore combine the measure m_s of intensity in dual-use inputs at the sector level with information on the sectoral composition of employment in each locality in the OPT to derive a new measure m_l of dual-use intensity at the locality level. This credibly captures the extent to which the economy and employment of each locality are dependent on dual-use inputs, thus informing the spatial distribution of the changes in economic conditions due to the list. Once again, we need to rule out the possibility that our measure is itself affected by the issuance of the dual-use list. As a benchmark, we consider the employment composition in each locality as recorded in the 1997 Population Census. This is three years prior to the beginning of the Second Intifada. The distribution of economic activity across localities in that year is therefore arguably exogenous to the conflict that followed, and the issuance of the dual-use list eleven years later.

We derive the sectoral composition of each locality using a confidential version of the 1997 Population Census, which contains information on the sector of employment of each individual in the Census.[17] This information is available for 570 localities in the West Bank and the Gaza Strip. We calculate our locality-level measure of intensity in dual-use inputs as

$$m_l = \sum_s \frac{L_s^l \, m_s}{L^l} \tag{3}$$

where L^l is the total number of workers in locality l in 1997, and L_s^l is the number of

[17] This information is provided at the ISIC 2-digit sector instead of the ISIC 4-digit sector. We use data from the Industry Survey in 1999 - which is the last survey before the conflict - to calculate an employment-weighted measure m_s of intensity in dual-use inputs of each 2-digit sector.

workers operating in sector s in the same locality in the same year. m_s is our previously derived measure of intensity in dual-use inputs at the sector level. Given the latter, m_l is higher if a larger share of workers in locality l is employed in 1997 in those sectors that are more intensive in dual-use inputs. The measure credibly captures the extent to which employment in locality l is concentrated in dual-use input intensive sectors.

It is worth highlighting here that the measures of intensity in dual-use inputs we derived at the sector (m_s) and locality (m_l) level are time-invariant: they are calculated using the US and the OPT in 1997 respectively as benchmark economies, and thus do not vary over time. This allows us to rule out from the start any concern that variation in these measures is itself informed by the issuance of the list. Figure 1 shows the geographical distribution of employment concentration in dual-use input intensive industries at the locality level. We do not identify any particular geographical pattern, meaning that we do not find those localities with a higher concentration of employment in dual-use intensive industries to be clustered in particular geographical areas. The data also show that m_l is not systematically higher in bigger localities, as the correlation with total population at the locality level in 1997 is equal to 0.03 and insignificant.

In our analysis, we also track the evolution of local labor markets across localities. For this purpose, we gather information from the Labor Force Survey from the years 1999 to 2012. The original micro data are designed as a rotating panel at the individual level, but do not provide information on the locality of residence of the respondent. We therefore use a confidential version of these same data, where information is aggregated at the locality-year level. We have information on the average daily wage earned by (employed) respondents in the locality, together with the average number of working days in a month. We also have information on the number of employed and unemployed respondents, plus those out of the labor force.[18]

Political Violence We derive our measure of political violence at the locality level using the information in the Integrated Crisis Early Warning System (ICEWS) dataset (Shilliday, A. and J. Lautenschlager 2012). Prepared by the Lockheed Martin Advanced Technology Laboratories, these data have been recently made available. The dataset covers the period from 1995 and 2015. It records any event of interaction between socio-political actors (i.e., cooperative or hostile actions between individuals, groups, sectors and nation states). Each entry provides information on the source and target

[18]The sum of employed, unemployed, and out of the labor force individuals gives the total number of surveyed individuals in each locality in each year. We divide the latter by the size of the locality population reported in the 1997 Population Census to derive sampling probabilities.

of each interaction. Events are assigned to specific categories using the Conflict and Mediation Event Observations (CAMEO) classification (Schrodt and Yilmaz 2007). Additionally, each of these categories is assigned an *intensity* variable using a scale from -10 to 10 (from most hostile to most cooperative). Events are automatically identified and extracted from news articles, and geo-referenced and time-stamped accordingly.

We build our panel dataset of political violence at the locality level as follows. We start from the ICEWS dataset of all events geo-referenced between 1999 and 2014 in the OPT. We then keep all events classified as *hostile*, where the value of the intensity variable attached to their assigned category takes values from -10 to -1 included. We then classify each category as violent or non-violent.[19] To capture all and only events of political violence caused by Palestinian civilians, we keep all the events where the source country is the OPT but exclude all those where the Government or related entities (such as the Palestinian police) are identified as source. We also keep only events where the target country is either the OPT or Israel.

A total number of 19,982 events of political violence took place between 1999 to 2014 in the OPT. The most frequent event types are: use of unconventional violence (29.07%), fight with small arms and light weapons (21.49%), use of conventional military force (11.99%). The most frequent identified sources of events are: citizens (15.87%), militants (13.16%), armed gangs (12.19%). We geographically match each event to the closest Palestinian location, and sum them at the locality and year level. This allows us to track the evolution of political violence in each locality over time.

Finally, with the objective of building a proxy for the demand of political violence in each given location, we geo-reference each checkpoint, observation tower and road block within the West Bank in each year. We collect these data using the maps made available by the United Nations - Office for the Coordination of Humanitarian Affairs (UN-OCHA). Consistent information is available from 2004 to 2012.[20]

5 Empirical Strategy

Our approach to identification is a *difference-in-difference* where we compare the evolution of economic and political outcomes across sectors or localities according to their intensity in dual-use inputs.

[19] See the Appendix for the details of our classification.
[20] Maps are available on the UN-OCHA website https://www.ochaopt.org/.

Our measures of intensity is calculated using the 2002 US Input-Output matrix, and the composition of employment at the locality level in the OPT in 1997. We assume that these are exogenous to the evolution of the Israeli-Palestinian conflict from the year 2000 onwards. Over this period, the issuance of the dual-use list represents an exogenous shock that differentially affects those sectors and localities more intensive in dual-use inputs. We therefore expect economic and political outcomes to evolve in a differential way after the issuance of the dual-use list in 2008.

As a first step, we test for the hypothesis that the dual-use list differentially affects those manufacturing sectors more intensive in dual-use inputs after 2008. The list limits the possibility for firms to import dual-use inputs, with an impact on their production choices and productivity per worker. We therefore expect the value of output to decrease differentially more for sectors more intensive in dual-use inputs after 2008. If workers are (at least to some extent) paid according to their marginal productivity, wages will decrease. Moreover, if labor market frictions prevent workers from moving freely across sectors, wages will decrease differentially more in those sectors that are more intensive in dual-use inputs, and in those local labor markets where employment is more concentrated in dual-use input intensive industries. As explained in the conceptual framework in Section 3, lower wages decrease the opportunity cost of engaging in political violence. We therefore expect the supply of political violence to increase disproportionally more after 2008 in those same localities where wages decrease differentially due to the dual-use list.

One possible concern with our identification strategy is that the exact composition of the dual-use list is informed by strategic considerations. In effect, the Israeli Government explicitly motivates the issuance of the list by internal security reasons (see, Defense Export Control Order 2008). According to the official documents, all goods and materials are included in the list because they have the potential to be used in the development and production of military capabilities. The list - by increasing the cost of the inputs needed to produce weapons, is thus expected to increase the (opportunity) cost of political violence. Our argument leads to the exact opposite prediction. We argue that, as a result of the list, output and wages decrease relatively more in those industries which use dual-use materials as inputs, decreasing the opportunity cost of political violence. In this respect, the concern that the list is primarily issued for internal security reasons would go against us and make it harder to find that the list increases political violence.

Another possible concern is that the composition of the dual-use list is motivated by

economic considerations. In particular, the Israeli government could have chosen the list of goods subject to import restrictions with the objective of curtailing more severely the economy of those areas where political violence was more prevalent or on the rise. As shown later, there is no evidence of differential changes in the level of political violence in the years prior to the issuance of the list across localities and according to their economy's intensity in dual-use inputs. This allows us to rule out this concern, and further confirms the validity of our approach.

More generally, it could be the case that our measure of dual-use intensity is correlated with other characteristics at the locality level which can account for a differential trend in economic and political outcomes. To address this concern, we regress the measure of intensity on a large number of baseline locality-level characteristics. This set of variables includes population in 1997, labor market variables such as daily wages and average number of days worked per month, and education variables such as share of individuals with no schooling, all in 1999. We show the results of these estimates in Table A.1 and Figures A.1, A.2, and A.3 in the Appendix. No one of these variables is ever a statistically significant predictor of intensity, showing that they are balanced out with respect to our treatment.

Finally, another possible concern is the violation of the Stable Unit Treatment Value Assumption (SUTVA). In particular, it may be that there are spillover effects of political violence from one locality to another. This legitimate concern is less compelling n the case of the West Bank, where mobility (of labor in particular) is limited (Abrahams 2015). According to the World Bank (2007), "administrative restrictions, rooted in military orders associated with the occupation of the West Bank [...] are used to restrict Palestinian access to large segments of the territories [...] Permit policies limit the freedom of Palestinians to move home, obtain work, invest, [...] move about outside of their municipal jurisdiction."[21] Nonetheless, we explicitly address this concerns allowing for spatial correlation of residual determinants of economic and political outcomes across localities (Conley 1999).[22]

[21] World Bank (2007). "Movement and access restrictions in the West Bank: uncertainty and inefficiency in the Palestinian economy." Washington, DC: World Bank

[22] Results are available upon request.

6 Results

6.1 Firms and Sectors

We start our empirical analysis by comparing the evolution of economic activity across sectors according to their production intensity in dual-use inputs. We implement the following baseline regression specification

$$y_{st} = \delta_t + \gamma_s + \beta\, m_s \times \textit{Post2008}_t + u_{st} \tag{4}$$

where y_{st} is the outcome of interest of sector s in year t. The year fixed effects δ_t capture and control for overall trends in economic activity that are common to all sectors. Sector fixed effects γ_s capture instead average differences across sectors that are constant over time. Our variable of interest is the interaction term, where m_s is the sector-level measure of intensity in dual-use inputs derived as explained in Section 4, and $\textit{Post2008}_t$ is a dummy equal to one for all observations belonging to year 2008 and after. Finally, u_{st} accounts for residual differences across sectors and years. We cluster the standard errors at the sector level in order to take into account the possibility of non-zero correlation across residuals of observations belonging to the same sector over time. Our coefficient of interest is β: it captures whether differences in production intensity in dual-use inputs map systematically into differences in sector-level outcomes, and differentially so after the implementation of the dual-use list in 2008.

Table 3 shows the corresponding coefficient estimates obtained using only data from the West Bank. In the first column, the dependent variable is the log of the value of output of each sector in each year. Our estimate of β is negative and significant at the 5% level. Evidence therefore suggests that those sectors which are more intensive in dual-use inputs experience a differential loss in output value after the issuance of the list. In order to readily interpret these number, we can calculate the differential loss in output value associated with moving from the 25th to the 75th percentile of our measure of intensity in dual-use inputs (from value 0.014 to 0.17). This corresponds to an 11% differential loss in output value. In the second column, we restrict our sample to those sectors for which we have price information available, finding very similar results. We do this in preparation for the results in columns (3) and (4), where we use as dependent variable the log of the price index at the sector level, and physical output as given by the ratio between output value and the price index. Our coefficient of interest in the price regression is positive but insignificant. This shows that the differential increase

in equilibrium prices is insignificant, which suggests that the elasticity of demand in the affected sectors is very high. Given the results in column (2) and (3), it comes as no surprise that, when having physical output as dependent variable in column (4), our estimate of β is negative, significant at the 5% level and comparable to the one we previously estimated for output value. Finally, in column (5), we use the log of wages paid in each sector as dependent variable. The estimate of our coefficient of interest is double in magnitude compared to the result for output. This means that moving from the 25th to the 75th percentile of our measure of intensity in dual-use inputs is associated with a 22% differential fall in wages.

Evidence shows that those sectors that are highly intensive in dual-use inputs pay differentially lower wages after 2008. Our claim is that this is the result of the issuance of the dual-use list. If this is the case, we should not observe any difference in wage patterns according to intensity in dual-use inputs in the years prior to 2008. Figure 2 plots the estimated coefficients of the interaction of the dual-use intensity measure m_s with the full set of year dummies from the year 2002 to 2012.[23] Consistent with our hypothesis, we do not see any significant differential trend in wages paid in dual-use input intensive sectors before 2008.

One possible concern with the above results is that those sectors that are highly intensive in dual-use inputs are also more intensive in foreign inputs in general. If that is the case, our measure m_s would not only be capturing the extent to which each sector is impacted by the list, but also heterogeneity in exposure to trade shocks in general. We address this concern by deriving a measure f_s of intensity in foreign material inputs. We calculate f_s by dividing the total value of foreign produced materials used in production in each sector by its total output value in the year 2000 (the first year for which separate information on foreign produced materials is available in the data).[24] We then include in our specification the interaction of f_s with the $Post2008_t$ dummy, controlling for and netting out any differential change across sectors according to their intensity in foreign inputs.

Table 4 reports the coefficients estimates from this augmented specification. Comparing these results with those in Table 3, we can see that the estimated coefficient of our variable of interest $m_s \times Post2008_t$ is very similar in both magnitude and significance. This indicates that the differential loss in output and wages that we observe in

[23] As explained in Section 4, we exclude the year 2011 from our analysis as no information on the ISIC 4-digit sector of activity is available for that year.

[24] The correlation between m_s and f_s is low, i.e. $\rho = 0.25$, which indicates that these two variables capture different mechanisms.

dual-use input intensive industries is not related to generic trade-related shocks, but it is the result of the issuance of the dual-use list.

Finally, Table 5 shows the corresponding coefficient estimates when restricting the sample to establishments in the Gaza Strip. Given that a strict overall blockade was enforced in the Gaza Strip in 2007-2010, we have no reasons to believe that intensity in dual-use inputs should be correlated with a differential evolution of economic outcomes in this region after 2008. We can thus frame the test for an impact of the dual-use list on economic activity in the Gaza Strip as a *placebo* exercise. None of the coefficients is significant when restricting the sample to the Gaza Strip. In the case of wages, the point estimate is both insignificant and small in magnitude. This further corroborates the validity of our approach to identification in the West Bank.

Taken all together, results from this section show that the issuance of the dual-use list has a negative impact on the economic activity of those sectors in the West Bank which are more intensive in dual-use inputs. With our estimates in hand, we can calculate the percentage loss in aggregate output value attributable to the policy. Setting the value of the coefficient of interest equal to zero, we predict the value of output in each sector that we would have observed in absence of the dual-use list. We find that, in the West Bank, the dual-use list policy accounts for a 1.3% loss in aggregate output value. Our results also show that wages fall disproportionally more in dual-use input intensive sectors after 2008. We expect this to negatively affect the labor market of those localities where employment is highly concentrated in these sectors, a hypothesis we can directly test using Labor Force Survey data.

6.2 Labour market outcomes

To analyze the effect of the dual-use list on local labor markets, we compare outcomes over time across localities according to their baseline level of concentration of employment in dual-use intensive sectors. We implement the following regression specification

$$y_{lt} = \delta_t + \gamma_l + \beta\, m_l \times \textit{Post2008}_t + u_{lt} \tag{5}$$

where y_{lt} is the outcome of interest of in locality l in year t. Year and locality fixed effects - δ_t and γ_l - net out overall trends and average differences across localities respectively. Our variable of interest is again the interaction term, where m_l is the 1997 locality-level measure of intensity in dual-use inputs derived as explained in Section 4, and $\textit{Post2008}_t$ is a dummy equal to one for all observations belonging to year 2008

and after. u_{st} captures residual differences across localities and years. We take into account the serial correlation of residuals over time by clustering the standard errors at the locality level.

We first consider as outcome the average daily wage in the locality. The sample is restricted to all localities surveyed in the Labor Force Survey in each given year. Given that our *treatment* is at the locality level, and the outcome variable is averaged across surveyed employed individuals in the locality, we can recover individual-level estimates by weighting each locality observations with the number of employed respondents in the locality.[25] Table 6 reports the corresponding coefficient estimates. Column (1) shows the estimate of β from a specification where only locality and year fixed effects are included, together with the main regressor of interest. The corresponding estimate is negative, but only significant at the 12% level. To improve its precision, we control for the composition of employment across macro-industries.[26] To the extent to which the issuance of the dual-use list does not lead to reallocation of labor across macro-industries in the short term, their employment shares are valid controls. At the same time, they allow to account for some of the residual variation in average daily wages, improving the precision of our estimates. The estimated coefficient is only somewhat different from the coefficient in column (1), and is now significant at the 5% level. In column (3) we saturate the model with quadratic locality-specific trends. The estimate becomes bigger in magnitude and significant at the 10% level. In column (4) we control for the presence of checkpoints, observation towers and road blocks within 0.05 degrees (5.5 km approximately) from the locality. As shown by Abrahams (2015), these obstacles inhibit labor mobility and thus have an independent effect on wages. The estimate of β is close to the one in column (2), and still significant at the 10% level. Finally, in column (5), we replace the log of average daily wage as dependent variable, showing qualitatively similar results. Figure 3 plots the coefficients of the dual-use intensity variable interacted with year dummies: the pattern of estimates' significance mirrors exactly the one of wages across sectors depicted in Figure 2.

According to the results in Table 6, moving from the 25th to the 75th percentile of our measure of intensity in dual-use inputs at the locality level (from value 0.004 to 0.045) is associated with a 1% differential decrease in average daily wages. While this appears to be a small effect, it only considers the first moment of the wage distribution. As shown in the previous section, the negative effect of the dual-use list on wages is

[25] As anticipated in Section 4, we further adjust weights to take into account sampling probabilities.

[26] The three macro-industries we consider are: 1) agriculture; 2) manufacturing and construction; 3) services.

heterogeneous, and concentrated among individuals who are employed in dual-use input intensive industries. Using the numbers from the previous section, a 22% decrease in wage for the 4.5% of the workforce yields an average change of 1%, consistent with the results in this section.

Results show that wages decrease systematically and differentially after 2008 in those localities in the West Bank where employment is more concentrated in dual-use input intensive industries. As in Section 6.1, we can use data from the Gaza Strip - where the list does not apply - to implement a placebo test. As expected, Table 7 shows that there is no evidence of systematic differences in wages after 2008 across localities in the Gaza Strip.

Tables A.2 and A.4 in the Appendix report estimates from the same specification as in equation 5, but focusing on other labor market variables in the West Bank. They show some evidence of an increase in unemployment and decrease in average monthly days of work in localities where employment is more concentrated in dual-use input intensive industries. Although the sign of coefficient estimates is consistent across specifications (unlike those for the Gaza Strip in Tables A.3 and A.5), they are rarely significant. Nonetheless, we interpret this as suggestive additional evidence that local labor market conditions worsen differentially in dual-use intensive localities in the West Bank after 2008.

6.3 Political Violence

In the last step of our analysis, we test for the effect of the dual-list on political violence. Lower wages decrease the opportunity cost of engaging in violence. We should therefore expect episodes of political violence to be more frequent in those localities where employment is more concentrated in dual-use input intensive industries. We thus compare the evolution of political violence across localities over time, and implement the same specification as in equation 5, but replacing as outcome y_{lt} the total number of events of political violence in the locality in the year.

Table 8 shows the corresponding estimates. In column (1), we implement the baseline specification where only locality and year fixed effects are included, together with the interaction variable of interest. The estimated coefficient of the latter is positive and significant at the 5% level. Its magnitude slightly increases when we include quadratic locality-specific trends in column (2), still significant at the 5% level. As we did for wages, in column (3) we include as controls the number of checkpoints, observations

towers and road blocks in the vicinity of the locality. These variables are meant to proxy for the demand of political violence in the location and its surroundings. The estimate of β remains significant at the 1% level. In column (4), we explicitly take into account the count nature of the dependent variable, and implement a fixed-effects poisson regression estimation. The estimated coefficient of the interaction variable of interest is still significant at the 1% level. Finally, in column (5), we replace the log of number of events (augmented by 1) as dependent variable, obtaining qualitatively similar and significant results.

Results show that episodes of political violence are differentially more likely to occur after 2008 in those localities where employment is more concentrated in dual-use input intensive sectors. Perhaps more strikingly, differently from what happens to sector output and wages, the differential pattern of violence persists well after 2009. This is clearly visible in Figure 4, which shows the estimated coefficient of the interaction of the dual-use intensity variable with year dummies. This result implies that negative economic shocks have a long lasting impact on violence, even after negative economic conditions are over, providing some evidence supporting the grievances mechanism. As with the rest of our analysis, Table 9 and the bottom panel of 4 show that the list has no differential effect across localities in the Gaza Strip.

According to the estimated coefficient from column (1) of Table 8, moving from the 25th to the 75th percentile of our measure of intensity in dual-use inputs at the locality level (from value 0 to 0.044) leads to a 0.07 increase in the number of violent events per year: an 8% increase over the mean. Estimates in Figure 4 show that this number increases to almost 22% between 2009 and 2011, when the average number of events per locality is lower. We can use our estimates to also calculate the total fraction of events of political violence occurred between 1999 and 2014 that can be attributed to the dual-use list policy. Setting the value of the interaction term equal to zero, we can predict the number of events per locality in each year that we would have observed in case the dual-use list was never implemented, and the trend in political violence had never diverged across localities after 2008. Still based on the results in column (1) of Table 8, we estimate that the dual-use list policy accounts for 13% of the total number of violent events in the period.

To conclude, we consider separately violent events targeting Israel and violent events targeting OPT. Note that the events we consider always take place in the West Bank. Figure A.4 and A.5 report the estimated coefficient of the interaction of the dual-use intensity variable with year dummies. The effect of the dual-use list is positive and

significant in both cases, i.e. when Israel is the target and when OPT is the target. While the estimates for events having Israel as target show weaker significance than the estimates for events having the OPT as target, the magnitude of the effect is comparable across the two. We interpret this as supporting evidence for both the opportunity cost and the grievance channels.

7 Conclusion

This paper studies the conditions under which security-motivated trade restrictions can fuel political violence. A simple theoretical framework clarifies our hypothesis. Barriers to trade decrease firm productivity and wages. This reduces the cost of engaging in conflict, and increases the supply of political violence. We test this hypothesis in the context of the OPT We exploit the issuance of a list of dual-use goods and materials which were *de facto* banned from entering the West Bank by the Israeli government in 2008. First, we show that restrictions in the accessibility of markets for listed materials decrease firm performance and wages in those sectors that use those inputs more intensively in production. Second, evidence shows that local labor market conditions worsen differentially in those localities where employment is more concentrated in dual-use intensive sectors. Third, we show that episodes of political violence are more likely to occur in these localities. All relationships are significant only for the West Bank, and only after 2008. We find no evidence for Gaza, where the list was not enforced since an overall blockade imposed by Israel was already in place prior to 2008.

To the best of our knowledge, this is the first study to show that, although security-motivated, trade restrictions may actually increase threats to security through the negative externalities they impose on targeted economies. Crucially, the extent to which this is the case depends on the exact nature of the latter, and on the production structure of the targeted economies. More generally, our findings raise doubts on the effectiveness of economic sanctions, a result in line with much of the previous literature.[27] The evidence we present suggests that ignoring the negative externalities of such policies can severely bias their evaluation.

The policy implications of our findings are important and timely. Our research shows that security policies may not be sufficient to eradicate political violence. In a period in which much of the political debate in developed democracies focuses on anti-terrorism intelligence and border fences, our results point out the importance of policies that favor

[27] For a thorough survey of the literature, see Drezner (2011).

economic development and, in turn, reduce the supply of political violence. Paradoxically, security policies that produce negative economic shocks are at risk of empowering those groups that are the original target by helping them recruit perpetrators of political violence.

We conclude with a note on the external validity of our results. While our argument is general and can be applied to virtually any other country experiencing political violence, we believe that focusing on the Israeli-OPT conflict is a tough test to find any evidence of negative externalities produced by trade sanctions. First, Israel has one of the most efficient and effective army in the world and is spending far more than other industrialized nations on security.[28] Second, the IDF has more than fifty years of experience in handling the conflict with Palestinians and in controlling the territory. We therefore speculate that testing our argument in countries with average military capabilities would produce even more striking results.

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[28] Almost a fifth of Israel's budget went on defense in 2009 - http://www.haaretz.com/israel-news/business/israel-shells-out-almost-a-fifth-of-national-budget-on-defense-figures-show.premium-1.503527 [consulted on May 25, 2016].

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Tables and Figures

TABLE 1: TIMELINE OF EVENTS: 2000-2010

Year	*Month*	*West Bank*	*Gaza Strip*
2000	September	Second Intifada begins	
2005	August		Disengagement of IDF
2005	August	Second Intifada ends	
2006	January	Elections in the OPT Hamas wins the elections Economic sanctions against the Palestinian National Authority	
2007	June		Battle of Gaza (Hamas/Fatah conflict)
	June	*de facto* division of the OPT: West Bank (PNA), Gaza (Hamas)	
	June	Removal of sanctions	Israeli imposes the blockade
2008	January	Issue dual-use list	
2010	January	Reduction of number of items in the dual-use list	Loosening of the blockade

Notes. Various sources. See Section 2 for detailed information on the political and economic context.

TABLE 2: INTENSITY IN DUAL-USE INPUTS BY SECTOR

ISIC 4	m_s	Description
		Least Intensive Sectors
1600	0.0001	Manufacture of tobacco products
1532	0.0001	Manufacture of starches and starch products
1543	0.0002	Manufacture of cocoa, chocolate and sugar confectionery
1542	0.0003	Manufacture of sugar
1554	0.0010	Manufacture of soft drinks; production of mineral waters
1549	0.0013	Manufacture of other food products n.e.c.
1553	0.0014	Manufacture of malt liquors and malt
1544	0.0014	Manufacture of macaroni, noodles, couscous, etc.
1520	0.0018	Manufacture of dairy products
1533	0.0020	Manufacture of prepared animal feeds
		Most Intensive Sectors
2720	0.3457	Manufacture of basic precious and non-ferrous metals
1723	0.3614	Manufacture of cordage, rope, twine and netting
3220	0.4102	Manufacture of television and radio transmitters, etc.
2922	0.4142	Manufacture of machine tools
2732	0.4343	Casting of non-ferrous metals
2731	0.4343	Casting of iron and steel
2696	0.4687	Cutting, shaping and finishing of stone
3592	0.4911	Manufacture of bicycles and invalid carriages
2411	0.4930	Manufacture of basic chemicals, except fertilizers and nitrogen compounds
2421	0.5637	Manufacture of pesticides and other agrochemical products

Notes. The table reports the bottom and top 10 ISIC 4-digit sectors with the lowest and highest value of intensity in dual-use inputs m_s. The value of m_s is between 0 and 1 by definition, as explained in Section 4 (Sources: BEA).

TABLE 3: INDUSTRIAL OUTPUT, PRICES AND WAGES IN THE WEST BANK

	Output Value	Output Value 4-digit PPI	Price	Output	Wages
$m_s \times$ *Post2008*$_t$	-0.704**	-0.646**	0.044	-0.691***	-1.428***
	(0.303)	(0.257)	(0.110)	(0.242)	(0.325)
Year FE	Yes	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes	Yes
Observations	1039	607	619	607	946
R^2	0.893	0.884	0.789	0.872	0.924

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is a 4-digit sector in a year. m_s is intensity of each sector in dual-use inputs as derived from US Input-Output matrix. All dependent variables are in log. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted by the number of establishments per sector. Standard errors are clustered at the 4-digit sector level (Sources: BEA, PCBS Industry Survey).

TABLE 4: ROBUSTNESS: INTENSITY IN IMPORTED INPUTS AS CONTROL

	Output Value	Output Value 4-digit PPI	Price	Output	Wages
$m_s \times$ *Post2008*$_t$	-0.686**	-0.622**	-0.034	-0.589*	-1.444***
	(0.340)	(0.310)	(0.121)	(0.321)	(0.371)
$f_s \times$ *Post2008*$_t$	0.040	0.101	-0.320*	0.421	-0.014
	(0.468)	(0.602)	(0.193)	(0.556)	(0.289)
Year FE	Yes	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes	Yes
Observations	878	593	599	593	815
R^2	0.884	0.883	0.795	0.872	0.924

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is a 4-digit sector-year. m_s is intensity of each sector in dual-use inputs as derived from US Input-Output matrix. f_s is intensity in imported material inputs calculated by dividing the value of imported materials by total output value in each sector in 2000. All dependent variables are in log. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted by the number of establishments per sector. Standard errors are clustered at the 4-digit sector level (Sources: BEA, PCBS Industry Survey).

TABLE 5: INDUSTRIAL OUTPUT, PRICES AND WAGES IN THE GAZA STRIP

	Output Value	Output Value 4-digit PPI	Price	Output	Wages
$m_s \times Post2008_t$	-0.456	-0.899	-0.013	-0.900	0.089
	(0.742)	(0.659)	(0.110)	(0.573)	(0.460)
Year FE	Yes	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes	Yes
Observations	794	503	569	503	636
R^2	0.853	0.851	0.803	0.849	0.898

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is a 4-digit sector in a year. m_s is intensity of each sector in dual-use inputs as derived from US Input-Output matrix. All dependent variables are in log. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted by the number of establishments per sector. Standard errors are clustered at the 4-digit sector level (Sources: BEA, PCBS Industry Survey).

TABLE 6: WAGES IN THE WEST BANK

	Daily Wage				
	(1)	(2)	(3)	(4)	(5) Log
$m_l \times$ *Post2008*$_t$	-15.988	-18.953**	-33.501*	-20.538*	-0.198*
	(10.285)	(9.546)	(17.611)	(11.162)	(0.113)
Share of Manuf		18.985***	13.723***	13.906**	0.242***
		(4.495)	(4.411)	(6.772)	(0.053)
Share of Agric		-7.661	-5.475	-15.001***	-0.111
		(5.313)	(5.184)	(5.641)	(0.075)
Trends	No	No	Yes	No	No
Obstacles	No	No	No	Yes	No
Year FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
Observations	2769	2571	2571	1585	2571
R^2	0.723	0.730	0.854	0.772	0.732

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in the Labor Force Survey a year. Dependent variable is average daily wage among employed individuals surveyed in the locality. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted according to estimated sampling probabilities and surveyed population in each location. Standard errors are clustered at the locality level (Sources: BEA, PCBS Labor Force Survey).

TABLE 7: WAGES IN THE GAZA STRIP

	Daily Wage				
	(1)	(2)	(3)	(4)	(5) Log
$m_l \times$ *Post2008*$_t$	15.166	-15.318	20.252	37.366	-0.261
	(78.007)	(85.732)	(85.760)	(64.547)	(1.418)
Share of Manuf		-12.118	1.926	-11.789	-0.231
		(13.943)	(11.817)	(13.873)	(0.207)
Share of Agric		4.422	3.582	-2.558	0.086
		(5.812)	(5.248)	(5.606)	(0.092)
Trends	No	No	Yes	No	No
Obstacles	No	No	No	Yes	No
Year FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
Observations	447	420	420	221	420
R^2	0.502	0.514	0.778	0.628	0.526

Notes. (* p-value$<$ 0.1; ** p-value$<$0.05; *** p-value$<$0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in the Labor Force Survey a year. Dependent variable is average daily wage among employed individuals surveyed in the locality. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted according to estimated sampling probabilities and surveyed population in each location. Standard errors are clustered at the locality level (Sources: BEA, PCBS Labor Force Survey).

TABLE 8: POLITICAL VIOLENCE IN THE WEST BANK

	Number of Violent Events				
	(1)	(2)	(3)	(4) Poisson	(5) Log
$m_l \times$ *Post2008*$_t$	1.671**	2.008**	2.575*	7.850***	0.061*
	(0.759)	(1.009)	(1.538)	(1.224)	(0.036)
Trends	No	Yes	No	No	No
Obstacles	No	No	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
Observations	7488	7488	3600	1728	7488
R^2	0.661	0.785	0.687		0.798

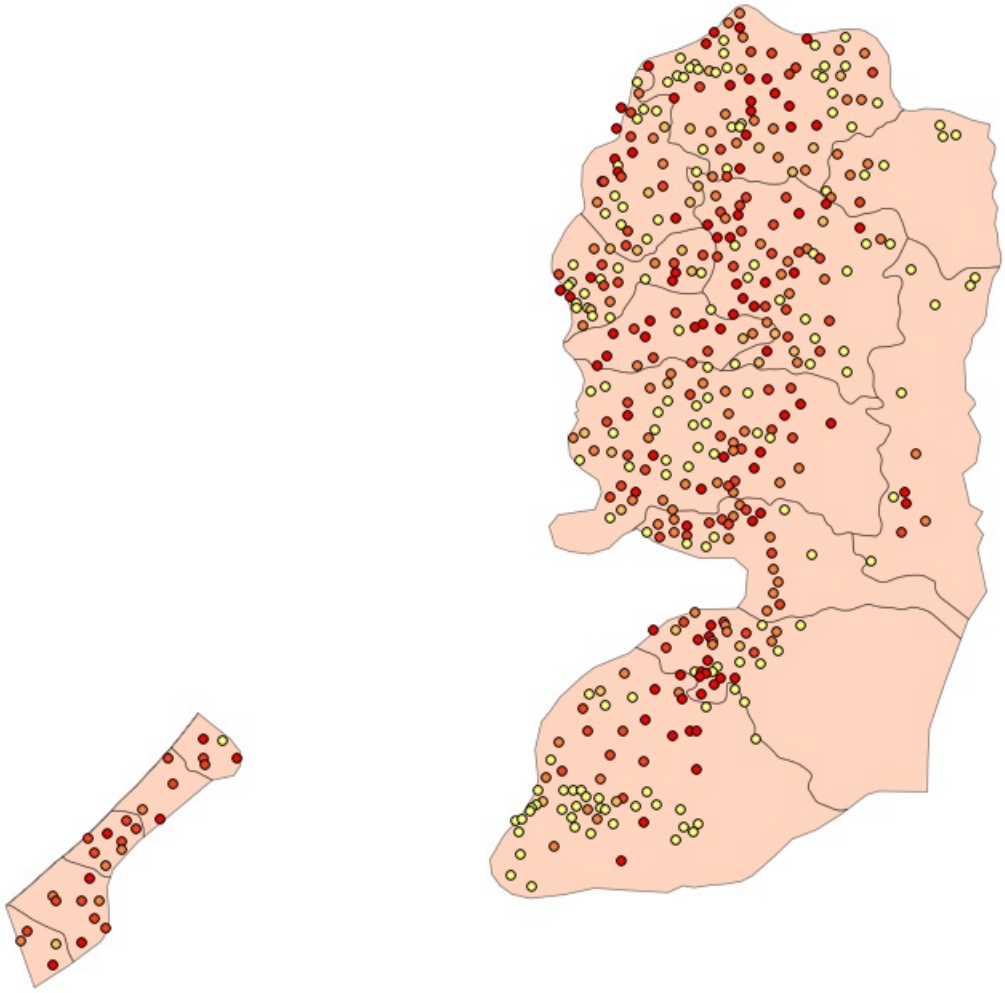
Notes. (* p-value$<$ 0.1; ** p-value$<$0.05; *** p-value$<$0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in a year. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Standard errors are clustered at the locality level (Sources: BEA, ICEWS, UN-OCHA).

TABLE 9: POLITICAL VIOLENCE IN THE GAZA STRIP

	Number of Violent Events				
	(1)	(2)	(3)	(4) Poisson	(5) Log
$m_l \times$ *Post2008*$_t$	-13.460	-43.666	231.514	-0.154	-2.598
	(57.289)	(152.397)	(261.167)	(2.913)	(2.826)
Trends	No	Yes	No	No	No
Obstacles	No	No	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
Observations	640	640	252	272	640
R^2	0.647	0.848	0.797		0.840

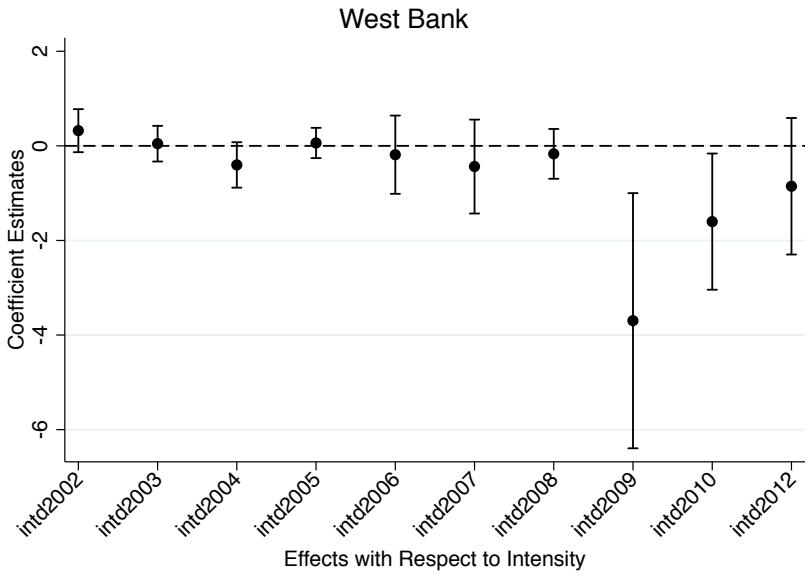
Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in a year. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Standard errors are clustered at the locality level (Sources: BEA, ICEWS, UN-OCHA).

Figure 1: Dual-use Intensity Across Locations



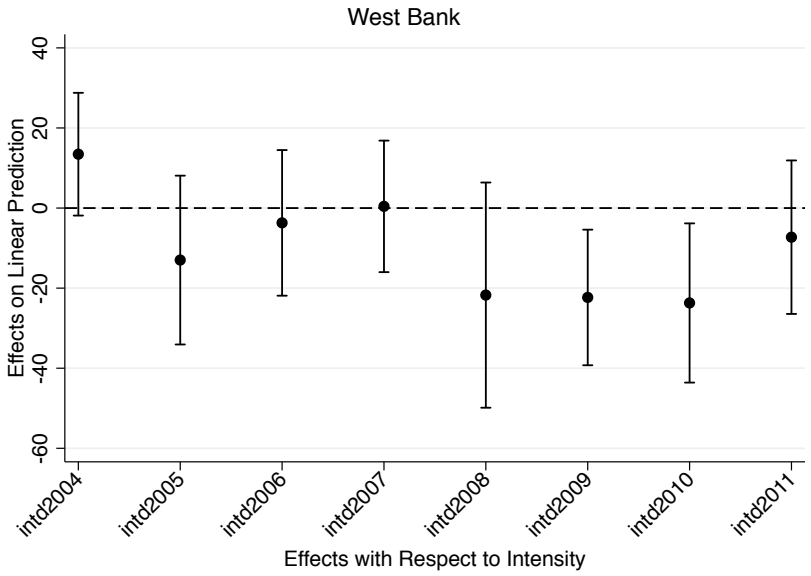
Notes. The Figure shows the location of each locality in both the West Bank and the Gaza Strip. Colors correspond to the degree of intensity in dual-use inputs in each location according to their quintile of the distribution of the m_l variable, from yellow to red (Sources: BEA, PCBS).

Figure 2: Dual-use Intensity and Wages Across Sectors



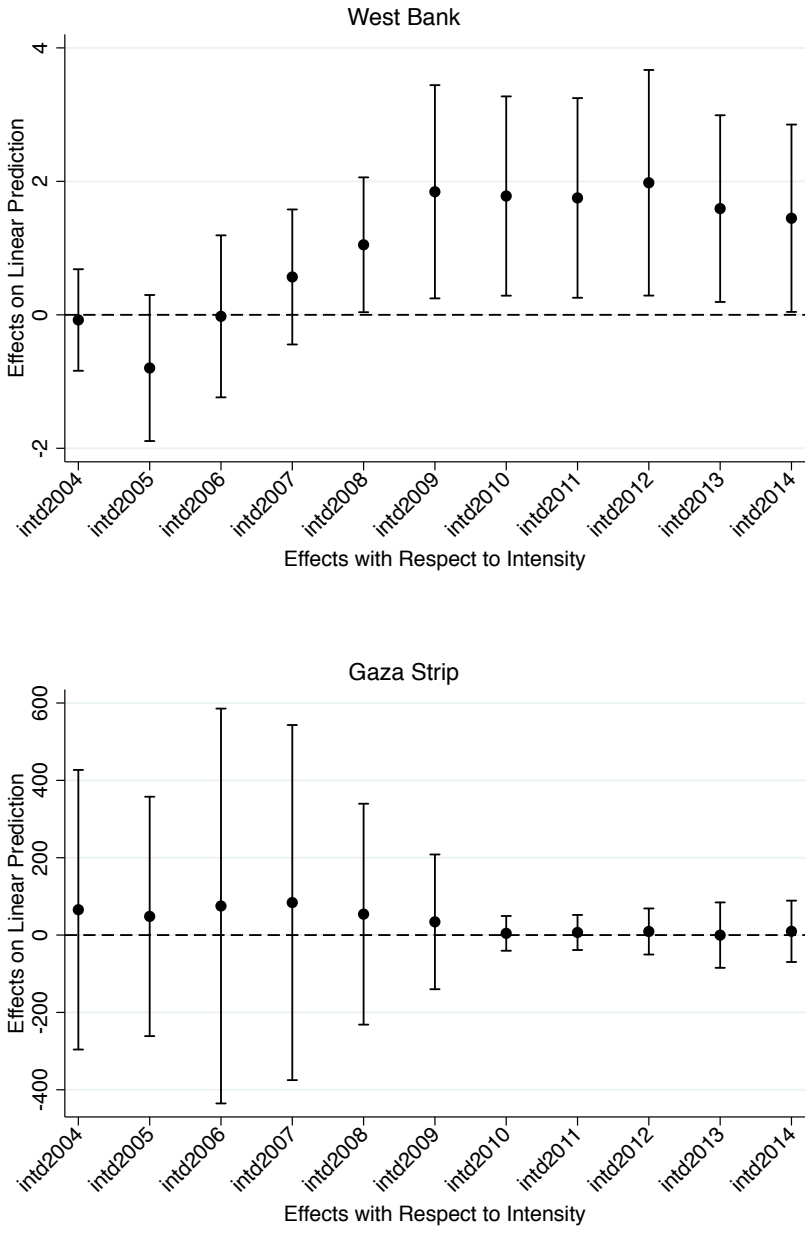
Notes. Dependent variable is the log of wages. The Figure plots the estimated coefficient of the interaction of the dual-use input intensity variable m_s with the corresponding year dummy. The solid vertical lines show the 95% confidence interval of each estimate, while the dash horizontal line indicates zero (Sources: BEA, Industry Survey).

Figure 3: Dual-use Intensity and Wages Across Localities



Notes. Dependent variable is the daily wage in the locality. The Figures plot the estimated coefficient of the interaction of the dual-use input intensity variable m_l with the corresponding year dummy. The solid vertical lines show the 95% confidence interval of each estimate, while the dash horizontal line indicates zero (Sources: BEA, Labor Force Survey).

Figure 4: Dual-use Intensity and Political Violence



Notes. Dependent variable is the number of violent events in the locality. The Figures plot the estimated coefficient of the interaction of the dual-use input intensity variable m_l with the corresponding year dummy. The solid vertical lines show the 95% confidence interval of each estimate, while the dash horizontal line indicates zero (Sources: BEA, ICEWS).

Online Appendix: Security, Trade, and Political Violence

TABLE A.1: TEST OF BALANCEDNESS

Variables	(1) m_l	(2) m_l	(3) m_l	(4) m_l	(5) m_l	(6) m_l	(7) m_l	(8) m_l	(9) m_l	(10) m_l	(11) m_l
Population	0.0001										
	(0.000)										
Daily wage		0.000									
		(0.000)									
Working days (per month)			-0.000								
			(0.002)								
Share of manufacturing				0.041							
				(0.031)							
Share of agriculture					0.046						
					(0.048)						
Share of workers in public sector						-0.065					
						(0.090)					
Share of self-employed workers							0.036				
							(0.082)				
Unemployment								-0.373			
								(0.281)			
Out of the labor force									-0.186		
									(0.129)		
Non-schooling										0.056	
										(0.089)	
High education											-0.021
											(0.046)
Constant	0.0382***	0.024	0.049	0.025*	0.036***	0.051***	0.034**	0.056***	0.144*	0.035***	0.045***
	(0.006)	(0.018)	(0.047)	(0.013)	(0.003)	(0.017)	(0.014)	(0.016)	(0.075)	(0.007)	(0.012)
Observations	187	187	187	187	187	187	187	187	187	187	187
R-squared	0.000	0.003	0.000	0.011	0.011	0.007	0.002	0.014	0.030	0.003	0.001
rmse	0.0781	0.0588	0.0589	0.0586	0.0586	0.0587	0.0589	0.0585	0.0580	0.0588	0.0589

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in 1999. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. Independent variables are locality-level characteristics (Sources: BEA, PCBS Labor Force Survey).

TABLE A.2: UNEMPLOYMENT IN THE WEST BANK

	Unemployment Probability			
	(1)	(2)	(3)	(4)
$m_l \times$ *Post2008*$_t$	0.069	0.072	0.152**	0.055
	(0.051)	(0.053)	(0.061)	(0.042)
Share of Manuf		-0.059***	-0.044***	-0.022
		(0.013)	(0.015)	(0.015)
Share of Agric		-0.019	-0.049***	-0.023*
		(0.013)	(0.014)	(0.014)
Trends	No	No	Yes	No
Obstacles	No	No	No	Yes
Year FE	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes
Observations	2769	2571	2571	1585
R^2	0.536	0.554	0.741	0.608

Notes. (* p-value$<$ 0.1; ** p-value$<$0.05; *** p-value$<$0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in the Labor Force Survey a year. Dependent variable is average probability of unemployment among individuals surveyed in the locality. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted according to the locality population size in 1997. Standard errors are clustered at the locality level (Sources: BEA, PCBS Labor Force Survey).

TABLE A.3: UNEMPLOYMENT IN THE GAZA STRIP

	Unemployment Probability			
	(1)	(2)	(3)	(4)
$m_l \times$ *Post2008*$_t$	-0.213	-0.244	0.104	-0.469**
	(0.205)	(0.209)	(0.226)	(0.220)
Share of Manuf		-0.036	-0.104***	-0.084
		(0.036)	(0.035)	(0.061)
Share of Agric		-0.101***	-0.095***	-0.104***
		(0.025)	(0.027)	(0.025)
Trends	No	No	Yes	No
Obstacles	No	No	No	Yes
Year FE	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes
Observations	2769	2571	2571	1585
R^2	0.676	0.723	0.829	0.662

Notes. (* p-value$<$ 0.1; ** p-value$<$0.05; *** p-value$<$0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in the Labor Force Survey a year. Dependent variable is average probability of unemployment among individuals surveyed in the locality. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted according to the locality population size in 1997. Standard errors are clustered at the locality level (Sources: BEA, PCBS Labor Force Survey).

TABLE A.4: MONTHLY DAYS OF WORK IN THE WEST BANK

	Monthly Days of Work				
	(1)	(2)	(3)	(4)	(5) Log
$m_l \times$ *Post2008*$_t$	-0.299	-1.162	-2.916	-0.035	-0.059
	(0.680)	(0.987)	(2.640)	(1.124)	(0.048)
Share of Manuf		-6.372***	-5.955***	-6.133***	-0.308***
		(0.603)	(0.705)	(0.815)	(0.030)
Share of Agric		-2.899***	-1.997**	-2.820***	-0.147***
		(0.691)	(0.801)	(0.700)	(0.034)
Trends	No	No	Yes	No	No
Obstacles	No	No	No	Yes	No
Year FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
Observations	2769	2571	2571	1585	2571
R^2	0.544	0.593	0.720	0.668	0.580

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in the Labor Force Survey a year. Dependent variable is average monthly days of work among employed individuals surveyed in the locality. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted according to estimated sampling probabilities and surveyed population in each location. Standard errors are clustered at the locality level (Sources: BEA, PCBS Labor Force Survey).

TABLE A.5: MONTHLY DAYS OF WORK IN THE GAZA STRIP

	Monthly Days of Work				
	(1)	(2)	(3)	(4)	(5) Log
$m_l \times$ *Post2008*$_t$	2.498	-0.127	8.690	0.228	-0.015
	(5.184)	(4.513)	(7.944)	(4.262)	(0.189)
Share of Manuf		-6.112***	-4.519***	-5.247***	-0.262***
		(0.796)	(1.448)	(1.803)	(0.034)
Share of Agric		-3.247***	-2.657***	-3.244***	-0.139***
		(0.631)	(0.830)	(0.720)	(0.027)
Trends	No	No	Yes	No	No
Obstacles	No	No	No	Yes	No
Year FE	Yes	Yes	Yes	Yes	Yes
Locality FE	Yes	Yes	Yes	Yes	Yes
Observations	447	420	420	221	420
R^2	0.001	0.147	0.071	0.113	0.142

Notes. (* p-value< 0.1; ** p-value<0.05; *** p-value<0.01) Standard errors in parenthesis. Unit of observation is an OPT locality in which was surveyed in the Labor Force Survey a year. Dependent variable is average monthly days of work among employed individuals surveyed in the locality. m_l is intensity of each locality in dual-use inputs as derived from the US Input-Output matrix and employment in the 1997 Population Census. *Post2008* is a dummy equal to 1 for observations belonging to the year 2008 or after. Observations are weighted according to estimated sampling probabilities and surveyed population in each location. Standard errors are clustered at the locality level (Sources: BEA, PCBS Labor Force Survey).

ISRAELI LISTS OF FORBIDEN & RESTRICTED GOODS TO THE WEST BANK

I. ARMS & MUNITIONS:

Forbidden transfer under all circumstances across Israel's frontiers without specific permits - as defined in the Control of Exports Security Order (Arms and Munitions) 2008, and in the Control of Exports Security Order (Missile Equipment) 2008.

II. LIST OF RESTRICTED DUAL-USE GOODS TO THE WB:

The list of restricted dual-use goods below is excerpted from the Defense Export Control (Controlled Dual-Use Equipment Transferred to Areas under the Palestinian Authority Jurisdiction) Order 2008 last updated on 2 August, 2009 and translated from Hebrew.

A. Chemicals

1. Chlorate salts
    a. Potassium chlorate – $KClO_3$
    b. Sodium chlorate – $NaClO_3$
2. Perchlorate salts
    a. Potassium perchlorate – $KCLO_4$
    b. Sodium perchlorate – $NaClO_4$
3. Hydrogen peroxide – H_2O_2
4. Nitric acid – HNO_3
5. Musk xylene – $C_{12}H_{15}N_3O_6$
6. Mercury – Hg
7. Hexamine – $C_6H_{12}N_4$
8. Potassium permanganate
9. Sulfuric acid – H_2SO_4
10. Potassium cyanide – KCN
11. Sodium cyanide – NaCN
12. Sulfur – S
13. Phosphorus – P
14. Aluminum powder – Al
15. Magnesium powder – Mg
16. Naphthalene – $C_{10}H_8$
17. Fertilizers
    a. Ammonium nitrate – NH_4NO_3
    b. Potassium nitrate – KNO_3
    c. Urea – CH_4N_{2O}
    d. Urea nitrate – $CH_4N_2ONO_3$
    e. Fertilizer 27-10-17
    f. Fertilizer 20-20-20
    g. Any fertilizer containing any of the chemicals in items a – c
18. Nitrous salts of other metals:
    a. Sodium nitrate – $NaNO_3$
    b. Calcium nitrate – $Ca(NO_3)_2$
19. Pesticides
    a. Lannate
    b. Endosulfan
20. Nitrite salt
21. Methyl bromide – CH_3Br
22. Potassium chloride – KCL

23. Formalin – CH_2O
24. Ethylene glycol – $C_2H_6O_2$
25. Glycerin – $C_3H_8O_3$

B. Other Materials and Equipment

26. Platen, titanium, or graphite plates not more than 10 cm thick
27. Communication equipment, communication support equipment, or any equipment that has a communication function
28. Equipment whose operation can cause interference in communication networks
29. Communication network infrastructure equipment
30. Lathe machines for removing metals (including center lathe machines)
31. Lathe machine spare parts, lathe machine equipment, and lathe machines accessories
32. Machine tools that can be used for one or more of the following functions: erosion, screwing, purifying, and rolling
33. Casting ovens of more than 600 degrees Celsius
34. Aluminum rods with a radius between 50 to 150 mm
35. Metal pipes of 50 to 200 mm radius
36. Metal balls with a radius of 6 mm and bearings containing metal balls with a 6 mm radius
37. Optical binoculars
38. Telescopes including aimers (and markers)
39. Laser distance measuring equipment
40. Laser pointers
41. Night vision equipment
42. Underwater cameras and sealed lenses
43. Compasses and designated navigation equipment including GPS
44. Diving equipment, including diving compressors and underwater compasses
45. Jet skis
46. External marine engines of more than 25 Hp and designated parts for such engines
47. Parachutes, surf-gilders, and flying models
48. Balloons, dirigible airships, hanging gliders, flying models, and other aircraft that do not operate with engine power
49. Devices and instruments for measuring gamma and x-rays
50. Devices and instruments for physical and chemical analysis
51. Telemetric measuring equipment
52. All-terrain vehicles
53. Firearms and ammunition for civilian use (e.g., for hunting, diving, fishing, and sports
54. Daggers, swords, and folding knifes of more than 10 cm
55. An object or a system of objects that can emit fire or detonators including fireworks
56. Uniforms, symbols and badges.
57. All items listed in the Defense Export Control Order (Controlled Dual-use Equipment), 2008 - Items listed under the Wassenaar Arrangement: As specified in the updated (2008) "Wassenaar Arrangement on Export Controls for Arms and Dual Use Goods and Technologies - List of Dual Use Goods and Technologies and Munitions List."

TABLE A.6: CLASSIFICATION OF VIOLENT AND NON-VIOLENT EVENTS 1/3

Violent	CAMEO Event Category
1	Abduct, hijack, or take hostage
0	Accuse
0	Accuse of aggression
0	Accuse of crime, corruption
0	Accuse of espionage, treason
0	Accuse of human rights abuses
0	Accuse of war crimes
0	Appeal for change in institutions, regime
0	Appeal for change in leadership
0	Appeal for de-escalation of military engagement
0	Appeal for easing of administrative sanctions
0	Appeal for easing of economic sanctions, boycott, or embargo
0	Appeal for easing of political dissent
0	Appeal for policy change
0	Appeal for political reform
0	Appeal for release of persons or property
0	Appeal for rights
0	Appeal for target to allow international involvement (non-mediation)
0	Appeal to yield
1	Arrest, detain, or charge with legal action
1	Assassinate
1	Attempt to assassinate
0	Ban political parties or politicians
0	Bring lawsuit against
1	Carry out car bombing
1	Carry out roadside bombing
1	Carry out suicide bombing
1	Coerce
0	Complain officially
0	Conduct hunger strike
0	Conduct hunger strike for policy change
0	Conduct strike or boycott
0	Conduct strike or boycott for policy change
1	Conduct suicide, car, or other non-military bombing
0	Confiscate property
0	Criticize or denounce
0	Decline comment
0	Defy norms, law
0	Demand
0	Demand change in institutions, regime
0	Demand change in leadership
0	Demand de-escalation of military engagement
0	Demand diplomatic cooperation (such as policy support)
0	Demand easing of administrative sanctions
0	Demand easing of economic sanctions, boycott, or embargo
0	Demand easing of political dissent
0	Demand economic aid
0	Demand humanitarian aid
0	Demand intelligence cooperation
0	Demand judicial cooperation
0	Demand material cooperation

TABLE A.7: CLASSIFICATION OF VIOLENT AND NON-VIOLENT EVENTS 2/3

Violent	CAMEO Event Category
0	Demand mediation
0	Demand meeting, negotiation
0	Demand military aid
0	Demand policy change
0	Demand political reform
0	Demand release of persons or property
0	Demand rights
0	Demand settling of dispute
0	Demand that target yields
0	Demonstrate for leadership change
0	Demonstrate for policy change
1	Demonstrate military or police power
0	Demonstrate or rally
0	Deny responsibility
1	Destroy property
1	Employ aerial weapons
1	Engage in ethnic cleansing
1	Engage in mass expulsion
1	Engage in mass killings
1	Engage in violent protest for leadership change
1	Expel or deport individuals
1	Expel or withdraw
1	Expel or withdraw peacekeepers
1	Fight with artillery and tanks
1	Fight with small arms and light weapons
0	Give ultimatum
0	Halt mediation
0	Halt negotiations
0	Impose administrative sanctions
0	Impose blockade, restrict movement
0	Impose curfew
0	Impose embargo, boycott, or sanctions
0	Impose restrictions on political freedoms
0	Impose state of emergency or martial law
0	Increase military alert status
0	Increase police alert status
0	Investigate
0	Investigate crime, corruption
0	Investigate human rights abuses
0	Investigate military action
0	Investigate war crimes
1	Kill by physical assault
0	Make pessimistic comment
1	Mobilize or increase armed forces
1	Mobilize or increase police power
0	Obstruct passage, block
0	Occupy territory
1	Physically assault
1	Protest violently, riot
0	Rally opposition against
0	Reduce or break diplomatic relations

TABLE A.8: CLASSIFICATION OF VIOLENT AND NON-VIOLENT EVENTS 3/3

Violent	CAMEO Event Category
0	Reduce or stop economic assistance
0	Reduce or stop humanitarian assistance
0	Reduce or stop material aid
0	Reduce or stop military assistance
0	Reduce relations
0	Refuse to de-escalate military engagement
0	Refuse to ease administrative sanctions
0	Refuse to ease economic sanctions, boycott, or embargo
0	Refuse to ease popular dissent
0	Refuse to release persons or property
0	Refuse to yield
0	Reject
0	Reject economic cooperation
0	Reject judicial cooperation
0	Reject material cooperation
0	Reject mediation
0	Reject plan, agreement to settle dispute
0	Reject proposal to meet, discuss, or negotiate
0	Reject request for change in institutions, regime
0	Reject request for change in leadership
0	Reject request for economic aid
0	Reject request for military aid
0	Reject request for military protection or peacekeeping
0	Reject request for rights
1	Seize or damage property
1	Sexually assault
0	Threaten
0	Threaten non-force
0	Threaten to halt negotiations
0	Threaten to impose curfew
0	Threaten to reduce or break relations
0	Threaten to reduce or stop aid
0	Threaten with administrative sanctions
0	Threaten with military force
0	Threaten with political dissent, protest
0	Threaten with repression
0	Threaten with restrictions on political freedoms
0	Threaten with sanctions, boycott, embargo
1	Torture
0	Use as human shield
1	Use chemical, biological, or radiological weapons
1	Use conventional military force
1	Use tactics of violent repression
1	Use unconventional violence
0	Veto
0	Violate ceasefire

Figure A.1: Dual-use Intensity and Population at Baseline

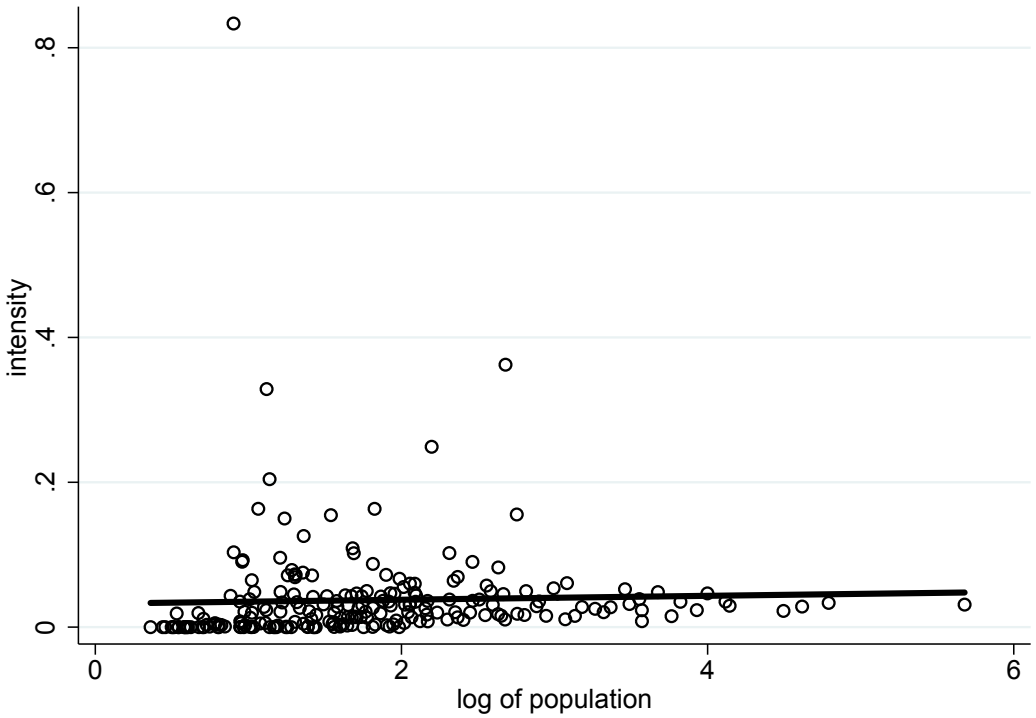


Figure A.2: Dual-use Intensity and Labor Market Variables at Baseline

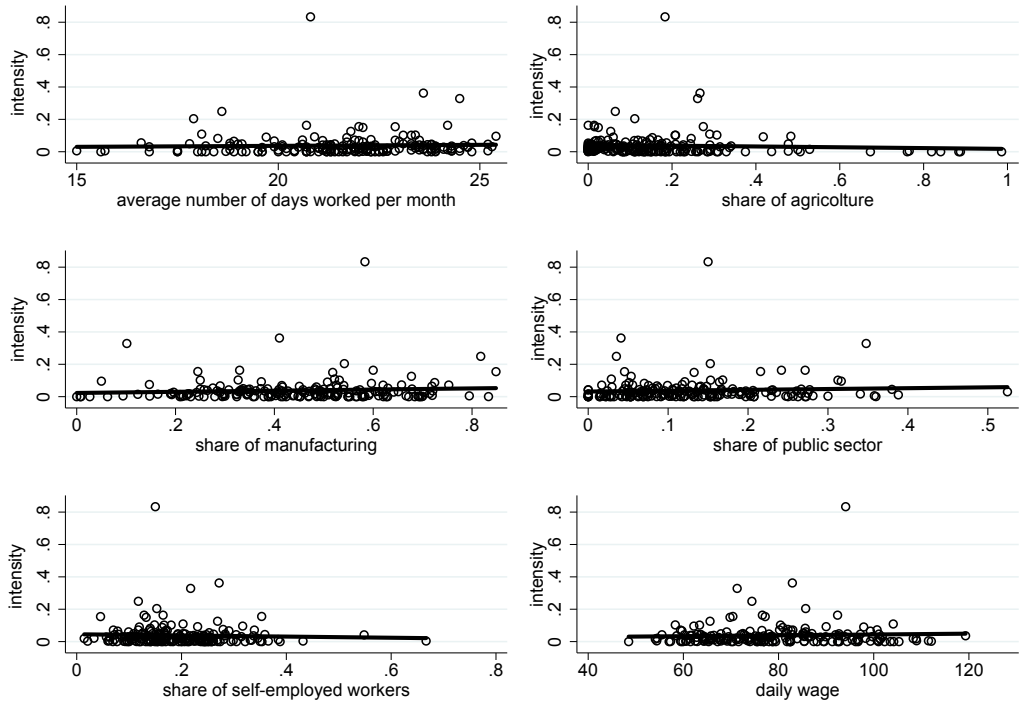


Figure A.3: Dual-use Intensity, Unemployment, and Education at Baseline

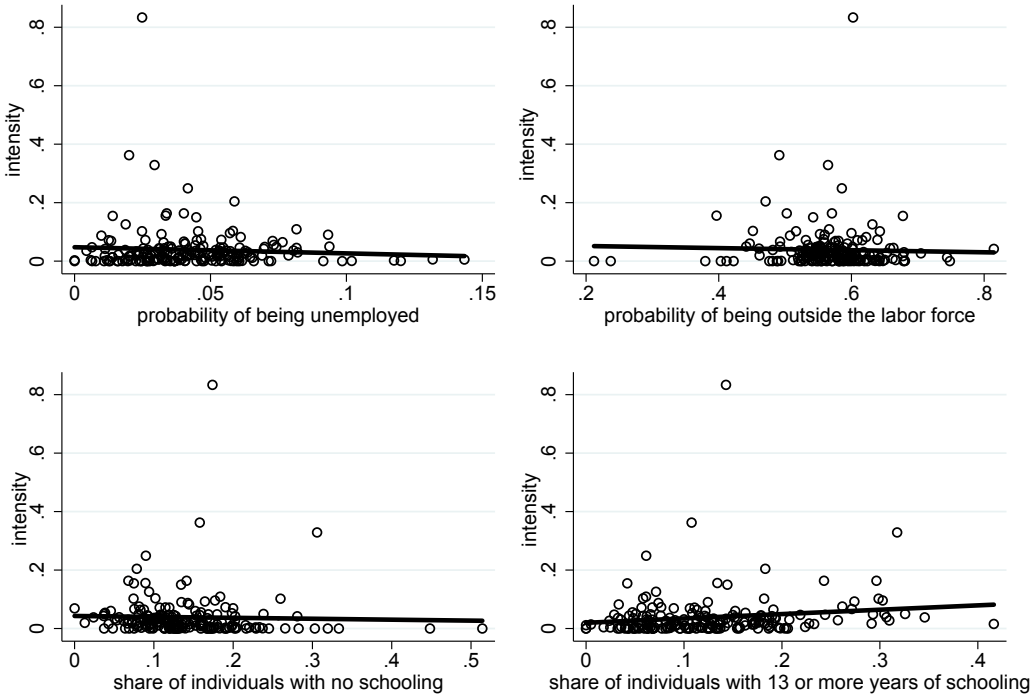


Figure A.4: Dual-use Intensity and Political Violence targeting Israel

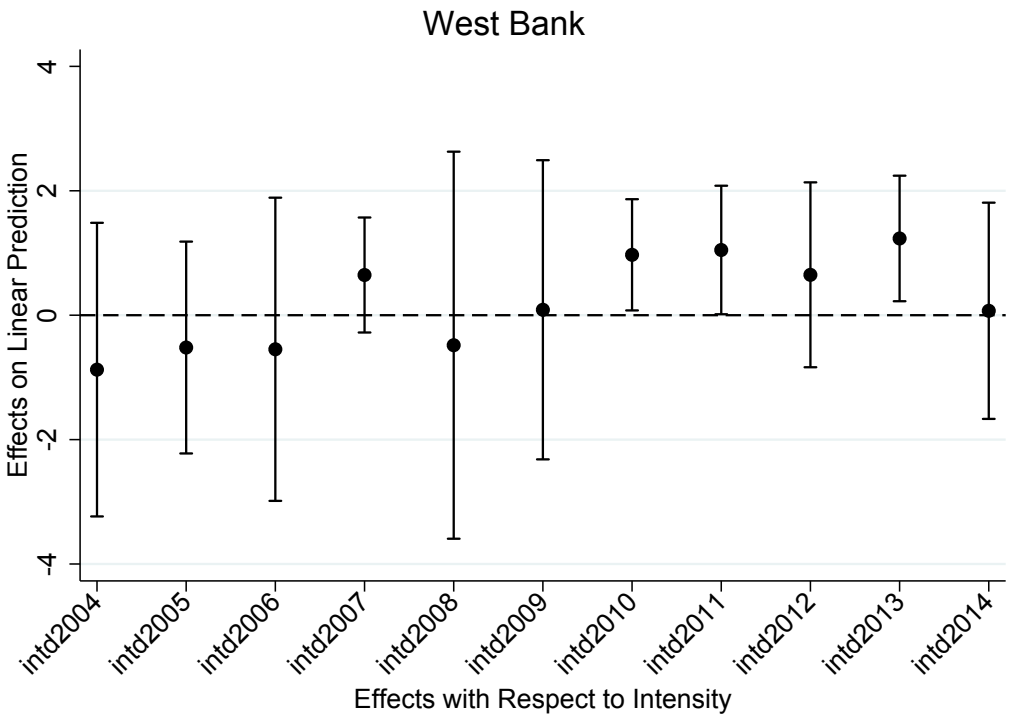


Figure A.5: Dual-use Intensity and Political Violence targeting OPT