Amidst all the concerns of uncertainty over the future of Afghanistan, recent developments have given hope to the world, specifically south and central Asia. A coalition government has now been established following the deadlock that came after the May 2014 elections. President Ashraf Ghani and Chief Executive Officer Abdullah have already signed a Bilateral Security Agreement (BSA) between Kabul and Washington, according to which 9800 troops will remain in Afghanistan beyond 2015. Furthermore, the government of Afghanistan seeks the support of the neighbouring countries to keep peace in the region. Despite all these concrete steps, there has been an increased number of terror attacks and drone operations which has put a big question mark on the stability of the country. How Afghanistan tackles these rising problems will be crucial in defining its future, the trickle-down effects of which will determine the stability of the Afghan-Pakistan region. Concerns about what the future holds for this region with a long history of violence and insurgency are currently being voiced at many levels of society, including on talk shows, at government meetings, within NGOs, and at business forums. Unlike most of the studies done on the Afghan-Pakistan region that focus on the security of the region, this article focuses on the welfare and economic impacts of post-2014 Afghanistan on the neighbouring Pakistani provinces of Balochistan and Khyber Pakhtunkhwa, at the household level.

Background

The International Security Assistance Force (ISAF) already pulled out 70 per cent of its forces by the end of May 2014, with only about 30,000 troops still remaining in Afghanistan. Due to recent developments, 9,800 foreign troops will remain in the country in 2015 to continue combat operations against insurgents, with the help of Afghan National Army. The Russians have once again shown an interest in Afghanistan and have identified numerous investment projects. They are concerned about the security of the region which could have direct implications for Russia (Stepanova 2013). The European Union, China, Iran, and India have also shown interest in the reconstruction and smooth transition of post-2014 Afghanistan. The decade-long war in Afghanistan and relations between Afghanistan and the above countries have implications for Pakistan, the neighbour most affected by turmoil in Afghanistan.

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Bilateral trade between Afghanistan and Pakistan has seen an increasing trend since the launch of the US war on terror in Afghanistan. The volume of bilateral trade between the two countries has increased from US$ 1.1 billion in 2005–06 to US$ 2.4 billion in 2011–12. Exports from Pakistan to Afghanistan have increased from US$ 1,063.4 million to US$ 2,449 million during the same period. Figure 1 indicates a balance of trade heavily in favour of Pakistan.

There has also been substantial change in the composition of Pakistan’s exports to Afghanistan. Between 2006 and 2011 there was a decline (or stagnancy in some cases) in the export of milk products, animal and vegetable oil, tableware, and household furniture. However, the export of cement, crude oil, wheat, and rice grew several fold. This is exhibited in Table 1. The growth in exports of these items can be attributed to a rise in construction activity and reverse migration during this period.

During the period NATO forces were in Afghanistan, employment in the trade, transport, warehousing, and communication (TTWC) sectors increased both in Afghanistan and in neighbouring Pakistani provinces. According to the authors’ calculations based on the Household Income Expenditure Survey taken in 2004–05 and 2010–11, growth in the TTWC sectors was about 290 per cent in Khyber Pakhtunkhwa and 450 per cent in Balochistan.

**Objective**

This study focuses on three specific changes:

1. The increase in the number of households associated with TTWC sectors in the seven years from 2004 to 2011.
2. The number of TTWC sector households belonging to the lowest income quintiles defined in the Household Income and Expenditure Survey of Pakistan.
3. The growth in TTWC sector incomes compared to non-trade sectors in Khyber Pakhtunkhwa and Balochistan provinces (Pakistan).

In the post-NATO exit milieu, any disturbance that deteriorates the political relations between Afghanistan and Pakistan will...
result in: reduction of the formal bilateral trade, reduced commercial transit, possible increase in IDPs and refugees flowing from Afghanistan to Pakistan, and a rise in the terror threat to the Pakistani population neighbouring Afghanistan. The worst affected in this scenario would be households already in the lowest income quintiles in TTWC sectors. As we will show later, many have come out of chronic and transient poverty as a result of increased trade with Afghanistan. However, under the scenario where NATO cargo comes to an end and there is a reduction in formal trade (if any) this population is poised to slip below the poverty line.

This would have a direct impact on security. It is particularly dangerous to have a population segment below the poverty line in a region that promotes and espouses militancy through madrassas\(^1\) (Hussain 2007) and has a history of militants challenging the authority of the state. A reduction in employment levels in this region will imply more youth resorting to crime and other social evils.

The remaining paper will include a brief literature review, a look at trade and regional cooperation efforts, methodology and data, results and tables, and conclusion.

**Brief Literature Review**

There is hardly any research that looks at the welfare implications of trade between Afghanistan and Pakistan. The studies conducted so far by the commerce ministries of both countries mainly discuss historical trends and barriers to trade. However, the private sector has shown active interest in exploring new trade possibilities between Pakistan and Afghanistan. A recent study by Hamid & Hayat (2012) explains that Afghanistan is one of Pakistan's major trading partners, with a long period of undocumented trade until the fall of Taliban regime in 2001. Between 2002 and 2010 there was a seven-fold increase in Pakistan's exports to Afghanistan, and by 2010 Afghanistan was Pakistan's third largest export market, accounting for 7.9 per cent of the latter's total exports.

In a briefing paper for the Planning Commission of Pakistan, Ahmed (2010) notes that Afghanistan had signed transit trade agreements not only with Pakistan but also with Uzbekistan, Iran, Turkmenistan, and Tajikistan. However, Pakistan holds the largest share (34 per cent) of transit imports and exports. Other studies conducted by the World Bank, USAID, and PITAD focus on issues that obstruct trade flows and suggest policies to overcome these obstructions. The main issues highlighted are a lack of reliable road or rail infrastructure, transportation bottlenecks, procedural inefficiencies, Pakistani businessmen’s lack of awareness of the market potential in Afghanistan, and, last but not least, border tensions.

There has been no research so far that studies the impact of growth in trade,

<table>
<thead>
<tr>
<th>Items</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk and cream &amp; sugar</td>
<td>18701</td>
<td>36024</td>
<td>73369</td>
<td>47167</td>
<td>20712</td>
<td>15461</td>
</tr>
<tr>
<td>Animal and Vegetable oil</td>
<td>105726</td>
<td>87989</td>
<td>111196</td>
<td>102265</td>
<td>95466</td>
<td>112973</td>
</tr>
<tr>
<td>Cement</td>
<td>92427</td>
<td>77218</td>
<td>120524</td>
<td>162025</td>
<td>181770</td>
<td>222571</td>
</tr>
<tr>
<td>Crude oil</td>
<td>242333</td>
<td>156473</td>
<td>433484</td>
<td>311431</td>
<td>510019</td>
<td>862722</td>
</tr>
<tr>
<td>Wheat and Rice</td>
<td>59</td>
<td>565</td>
<td>1330</td>
<td>14868</td>
<td>16875</td>
<td>78018</td>
</tr>
<tr>
<td>Table ware and Household furniture</td>
<td>69463</td>
<td>19211</td>
<td>36328</td>
<td>21790</td>
<td>17009</td>
<td>18789</td>
</tr>
</tbody>
</table>

**Table 1**: Pakistan’s Key Exports to Afghanistan. *Source: State Bank of Pakistan 2013.*
transportation, warehousing, and communication sectors (TTWC) on the economic welfare of local populations in the Pakistani provinces that border Afghanistan. However, studies show that Pakistan has suffered economically and socially as a result of the three million Afghan refugees that have entered Pakistan over time (Rais 2009). Up until 2013, estimates show that Pakistan had lost over US $ 90 billion in the ‘war against terror.’ Moreover, civilian casualties were reported to be 51,000, with 11,000 in the year 2009 alone (Sultan et al. 2013). With already so much damage inflicted upon the two countries it has been difficult to move forward diplomatically. Cross-border raids and assassinations of senior officials have tainted any efforts to pursue peace talks (Hussain 2011).

With a four decade-long history of mistrust between the two neighbouring Muslim countries, Pakistan looked to the United States to ensure a peaceful transition. That too now seems to be a lost cause after the 2012 Chicago Summit, where President Obama failed to recognize the harms suffered by Pakistan during the decade-long war in Afghanistan. According to Lodhi (2012), the Summit talks fortified the impression that the US is more interested in an exit plan than lasting peace in the region. Furthermore, much to Pakistan’s dismay, the long-pending Bilateral Security Agreement (BSA) was signed between Kabul and Washington in September 2014.

In recent months there has been a drastic increase in terror attacks which have certainly caused alarms to sound in Pakistan and the rest of the region. The situation in Afghanistan is evolving quickly. The Afghan National Army (ANA) is unprepared to combat the insurgents alone which leads to the question: is Afghanistan headed towards another civil war? If so, the increased influx of refugees to Pakistan poses a great threat to the economy of this region (Iqbal 2011). Repeated efforts have been made to initiate peace talks between Kabul and the Taliban to ensure a smooth transition after the NATO drawdown, but there is little hope that anything conclusive will be reached (Xiangyu et al. 2013).

We believe that the Pakistani provinces studied in our analysis - Balochistan and Khyber Pakhtunkhwa - are prone to trade-related shocks in the event of any security disturbance in Afghanistan or closure of transit trade. It is important to bridge the gap in the literature by assessing how much these populations are dependent on these important sectors which in turn are reliant upon future political stability in Afghanistan.

**Trade and Regional Cooperation**

**Situation Analysis**

Afghanistan is a landlocked country located between central Asia and Europe. It has an area of 650,000 square kilometres and borders Pakistan, Tajikistan, Iran, Turkmenistan, Uzbekistan, and China. According to the World Population Review (2014), the population of Afghanistan by the end of 2013 was estimated to be 30 million. Despite the fact that only 12 per cent of its land is arable, more than 85 per cent of the Afghan population is dependent on agriculture (Government of Afghanistan 2010). The country’s major crops include wheat cereal, rice, barley, maize, fruits and nuts, and cotton; livestock is also an integral part of the economy. Afghanistan is a mineral-rich country with untapped natural resource deposits estimated to be worth US$ 1 trillion, according to senior US government officials (Risen 2010). Pakistan is Afghanistan’s single largest trading partner, followed by Iran, China, and India. Recently, imports from Kazakhstan have increased substantially, rising from around half a billion USD in 2008 to 3.2 billion USD (Parto et al. 2012).

Pakistan, situated to the east of Afghanistan, has an area of 796,000 square kilometres. It borders Iran, Afghanistan, China, India, and the Arabian Sea. According to the UNDP (2013), Pakistan is the sixth most populous country of the world with a population exceeding 180 million people. Pakistan, once a predominately agricultural economy, is now semi-industrialized with
growth centres located along the Indus river. However, the principle economic sector continues to be agriculture, which employs the largest share of the labour force. Major crops include wheat, cotton, rice, vegetables, and fruit. The largest manufacturing sector in Pakistan is the textile industry which has also generated huge employment opportunities for skilled and unskilled labour. Pakistan’s top five trading partners are the United States, China, the United Arab Emirates, Afghanistan, and the United Kingdom (Government of Pakistan 2012).

Trade Agreements

**Afghanistan Transit Trade Agreement (ATTA)**

Since the inception of the country of Pakistan there have been many bilateral and multilateral trade agreements signed with neighbouring Afghanistan to facilitate and promote direct trade and transit trade. The earliest, the Afghanistan Transit Trade Agreement (ATTA), was signed in 1965 between the governments of Pakistan and Afghanistan (Government of Pakistan 1965). The first article of this agreement guaranteed the freedom of transit trade to both countries. ‘Traffic in transit trade’ was also defined under this agreement. The transit routes were identified as Peshawar-Torkham and Chaman-Spin Boldak, with a provision to add future trade corridors. Both countries also agreed upon the development of the Kabul-Torkham-Peshawar trade route with a railway line extension. It was also agreed that liaison officers would be appointed in each country for efficient communication and planning to further facilitate trade. Officials from the two countries would meet on an annual basis to review the working of the agreement (Swan et al. 1993).

**South Asian Association for Regional Cooperation (SAARC)**

Pakistan, along with Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka, signed the charter of South Asian Association for Regional Cooperation (SAARC) in 1985. The main objectives of this charter, drafted with strict adherence to the principles of United Nations charter, were to promote the welfare of the people of South Asia, accelerate economic growth, enhance mutual trust amongst the concerned nations, and extend assistance in social and economic fields. It was agreed that the principles of this association would be consistent with already existing bilateral or multilateral agreements. Furthermore, this association was not to be mistaken as a substitute for bilateral or multilateral cooperation but as a complement to them. Annual meetings of the member states were also envisaged by the charter.

In 2004, at the 12th SAARC summit in Pakistan, the South Asian Free Trade Area (SAFTA) agreement (SAARC 2004) was signed by all member states. This agreement created a free trade area for the entire region, home to 1.6 billion people at the time. The aim was to reduce customs duties to zero by the year 2016. A working plan for SAFTA was also discussed according to which the developing countries - i.e. India, Pakistan, and Sri Lanka - were to bring their duties down to 20 per cent in two years. Under-developed countries - i.e. Bhutan, Bangladesh, Nepal, and Maldives - had an additional three years to do the same.

In 2005, before the implementation of SAFTA, Afghanistan also applied to join SAARC. In 2007, after much deliberation among the SAARC member states, Afghanistan was welcomed as the 8th member. SAFTA was ratified in 2009 by India and Pakistan and in May 2011 by Afghanistan.

**Pak-Afghan Joint Economic Commission**

In 1992 Afghanistan and Pakistan established the Pak-Afghan Joint Economic Commission (JEC) to promote trade, deliberate on issues related to bilateral and transit trade, and strengthen their economic relationship. The JEC meetings have been held alternatively in Kabul and Islamabad.

The 8th meeting of the JEC was held in January 2012 in Islamabad. The delegations from both countries were led by their respective finance ministers. During the meeting...
the delegates discussed the implementation status of decisions taken at the previous JEC meeting and developed further on cooperation in areas of economics and trade. Problems faced by Afghan and Pakistani traders put forth at the previous meeting were duly addressed and solutions were implemented. Amongst those solutions were the Web Based One Customs System (WeBOC) (used to exchange information to facilitate transit trade), insurance guarantees by the customs security, and permission for non-containerized carriage of vehicles to be used by Afghan traders. Through the introduction of the new transit system at Torkham, Pakistani traders would no longer be required to acquire transit permits from the Afghan authorities. The ban on timber imports from Afghanistan was also lifted (MoC 2012).

The 9th JEC meeting was held in Kabul from 22–24 February 2014. The agenda points were categorized by theme, including Trade & Commerce, Reconstruction Activities in Afghanistan, Water & Energy, and Industry & Agriculture. The Afghan authorities simplified the visa process for Pakistanis working in Afghanistan to address issues raised by Pakistan at the previous JEC meeting. Despite financial constraints, Pakistan increased levels of investment in development projects from US $ 385 million to US $ 500 million. An increase in the number of students to be admitted to an already implemented scholarship program (from 2,000 to 3,000) was in the approval process. Moreover, disciplines covered by the scholarship program would now also include applied sciences in addition to social and natural sciences. The final version of the Electronic Data Interchange (EDI) was approved to be launched in March 2014. After a re-evaluation of the cost of the Torkham-Jalalabad Additional Carriage Way (ACW) project it was agreed to resume work by June 2014 and finish it before the end of 2015. For the motorway project between Peshawar and Kabul a team of consultants were to share their report on the project by March 2014. Before the next JEC meeting an additional transit-trade corridor through Bannu-GhulamKhan-Khost could also be examined whereas the Sherkhan-Ninjpayan route, originally identified as the CAREC corridor, would potentially be used as a road link connecting Pakistan, Afghanistan, and Tajikistan. The railway link connecting Peshawar and Jalalabad was approved by the government of Pakistan, with construction set to begin in June 2014. It was mutually agreed that the progress of the TAPI project was on schedule. However, immediate resolutions were demanded on CASA-1000 and the Joint Hydro Power Project on the Kunar River so that feasibility reports could be presented to the Board of Directors at the World Bank for approval in March 2014 (MoC 2014).

Central Asia Regional Economic Cooperation (CAREC)
In 1997 the Central Asia Regional Economic Cooperation (CAREC) Program was initiated with the aim of increasing trade and cooperation between the People’s Republic of China, Kazakhstan, the Kyrgyz Republic, and Uzbekistan. The program was principally supported by the Asian Development Bank (ADB). The European Bank for Reconstruction and Development, the International Monetary Fund, the Islamic Development Bank, the United Nations Development Program, and the World Bank are also partners on the program. The objective was to integrate the economies of these Eurasian countries to facilitate rapid growth. Under the theme of ‘Good Neighbours, Good Partners, Good Prospects’ the CAREC program aims to reduce poverty and reach higher levels of economic growth by building on their neighbours’ strengths rather than working in isolation. In 2005 Afghanistan became a member of CAREC; five years later, in 2010, Pakistan also joined. To date, CAREC has ten member countries, namely Afghanistan, Azerbaijan, People’s Republic of China, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.
A strategic framework for CAREC-2020 - endorsed in 2011 - was an enhancement of the earlier Comprehensive Action Plan (CAP), which defined priorities of cooperation in the areas of transport, trade policy, trade facilitation, and energy cooperation. The following year the implementation of the CAREC-2020 strategic framework was endorsed under the Wuhan Action Plan.

Priority projects in the transportation sector in Afghanistan under CAREC-2020 include the construction of the Shirkhan Bandar-Kunduz-Kholam-Naibabad-Andkhoy-Heart railway line and the Bala Murgab-Leman road. In Pakistan prioritized projects include the reconstruction of a number of expressways and the construction of a new motorway connecting Karachi, Hub Dureji, and Sehwan (CAREC 2012). There are a total of 108 investment projects under the Transport and Trade Facilitation Strategy Implementation Action Plan projected to cost US $ 38.8 billion. The rail link connecting Afghanistan to Uzbekistan was set to be completed by the end of 2014. Future planned links would connect Pakistan, Tajikistan, and Turkmenistan.

The Wuhan Action Plan calls for energy cooperation in the region, exploring interconnecting options along the Central Asia-South Asia Energy corridor. The plan also calls for a design of regulatory framework for energy trade as well as a push to shift to renewable energy.

Central Asia South Asia (CASA - 1000)
The Central Asia South Asia Regional Electricity Market (CASAREM), popularly known as CASA-1000, is an agreement between Afghanistan, Kyrgyz Republic, Pakistan, and Tajikistan. In 2004 a report submitted to the World Bank (Markandya et al. 2004) noted that South Asia (Afghanistan and Pakistan in particular) contained the largest markets for electricity exported from Central Asia (Kyrgyz Republic and Tajikistan). In 2008–09, before CASA-1000 was inched, an initial feasibility report was prepared, financed by the Asian Development Bank. The report analysised the practicality of exporting 1000 MW of electricity from Central Asia to South Asia. The following year, in 2010, a techno-economic feasibility report was added to the initial report to take into consideration environmental and social costs. After much deliberation by the Inter-Governmental Council (IGC), the Islamic Development Bank, the World Bank, and the four concerned countries, the report was finalised in February 2011. The updated report prepared by SNC Lavalin International (2011) predicts an annual summer surplus of 3.75 TWh in Tajikistan and 2.15 TWh in Kyrgyzstan by the year 2016. In September 2011 a memorandum of understanding was signed in Bishkek, Kyrgyz Republic, binding the Central Asian states of Kyrgyz Republic and Tajikistan to supply surplus energy to Afghanistan and Pakistan. The proposed route to transport the surplus energy would run from Datka (Kyrgyzstan) to Peshawar (Pakistan), passing through Khoudjand and Sangtuda (Tajikistan), then Salang Pass and Kabul (Afghanistan). This project is estimated to cost roughly US $ 950 million. The long term objective is to supply clean hydropower from Central Asian countries to South Asian countries during summers, a period during which the latter countries face chronic electricity shortages. In January 2014 the four member states met in Almaty to discuss project financing at length. Tajikistan and Kyrgyzstan briefed the Joint Working Group (JWG) to discuss progress made in reducing the financing gap; the delegation from Pakistan stressed its desire to expedite this process. At the last meeting, held in Washington, the National Transmission Companies (NTCs) of the respective countries resolved to resolve Power Purchase Agreement (PPA) issues by the end of March 2014; tariff structures were eventually agreed upon in December 2014 and financing has been approved.

Afghanistan Pakistan Transit Trade Agreement
In October 2010 the commerce ministers of Afghanistan and Pakistan, Dr Anwar ul Haq and Makhdoom Amin Fahim respectively,
signed the Afghanistan Pakistan Transit and Trade Agreement (APTTA) in Kabul (MoC 2010). The agreement came into force on 12 June 2011. Under this agreement Afghan trucks were allowed to transport Afghan products destined for the (immense) markets of India and China (as well as the rest of the world) to the Karachi seaports of Port Qasim and Gwadar. APTTA replaced the earlier ATTA agreement (signed in 1965) following repeated concerns raised by Pakistan over its misuse. According to APTTA, the sole entry point for Afghan trade cargo into Pakistan was Port Qasim in Karachi. The exit points were Torkhum (North West Frontier Province [NWFP] since re-named Khyber Pakhtunkhwa [KP]) and Chaman (Balochistan province).

APTTA was intended to make it easier and cheaper for Afghan goods to reach foreign markets. This agreement allowed Afghan goods access to two of the world’s largest markets: India and China, with populations of 1.1 billion and 1.2 billion respectively. APTTA is expected to increase Afghanistan’s exports and reduce delays at borders, thereby making Afghan products more competitive, attractive, and affordable abroad. Customs practices in place at the borders will be modernized and simplified. Additionally, Pakistani exports will have easier access to Central Asian and European markets. As a consequence, the service sectors of both countries should experience a boom, increasing employment levels.

APTTA guarantees freedom of transit between Afghanistan and Pakistan. Along the approved corridors, Afghan trucks are allowed to transit into Pakistan. In addition, Afghans have the freedom to choose their type of vehicle as long as they remain on specified routes within specified times. Furthermore, port and rail fees will be the same for national and international vehicles without discrimination. Freight forwarders and transport operators are now at liberty to establish businesses in Pakistan to facilitate transit trade activities.

Drivers’ licenses and vehicle documents issued in Pakistan or Afghanistan will henceforth be recognized by both countries. Special offices will be set up to respond to questions and concerns from nationals of either country regarding this issue.

All duties were annulled for goods in transit. The only fees will include charges incurred when scanning and weighing goods as well as tolls for bridges, tunnels, roads, and parking. The rate charged for the goods in transit will be non-discriminatory and reasonable.

A coordination authority known as the Afghanistan Pakistan Transit Trade Coordination Authority (APTTCA) made up of government officials and private sector stakeholders from both countries will oversee the implementation of the agreement. In the event of any disputes arising, a panel consisting of members from the two countries and a neutral third country will examine the case and implement a solution. The decision will be final and binding.

APTTA encourages economic growth for both countries by building stronger commercial relationships between Afghanistan and Pakistan. It also strengthens economic ties and ensures the smooth and efficient movement of goods through both countries and across the region.

This agreement makes the South Asian Free Trade Agreement (SAFTA) easier and cheaper to implement. SAFTA will lower tariffs for Afghan goods across the region. APTTA will also contribute to greater regional security as Afghanistan and Pakistan work together for mutual economic growth and prosperity.

Pak-Afghan Joint Chamber of Commerce & Industry
The first Board meeting of the Joint Chamber was held in Karachi on 13 March 2012. During the meeting Zubair Motiwala from Pakistan was unanimously elected as President of the Chamber while Khan Jan Alkozai was elected as Co-President.

Methodology and Data
This study employs three different methods, both quantitative and qualitative, to assess the impact of post-2014 Afghanistan
on Pakistan, as shown in Figure 2. Firstly, we use the Household Income Expenditure Survey (HIES) from Pakistan for the years 2004–05 and 2010–11 to form a descriptive analysis of the welfare of households associated with TTWC sectors. Secondly, using the same data set, we form a time series econometric relationship between household income and its determinants. Lastly, two focus group discussions with government officials, security analysts, economic think tanks, journalists, producers, and traders helped form the qualitative part of this study.

In order to assess the impact of TTWC sectors on the local population we use HIES data from Pakistan for the years 2004–05 and 2010–11. We limit our analysis to Khyber Pakhtunkhwa and Balochistan. We have compared population numbers, household characteristics, and welfare indicators of respondents associated with trade, transport, warehousing, and communication sectors (TTWC) in both years. Our descriptive analysis of HIES data will specifically address the following three questions:

1. Has employment during the period 2004–11 grown faster for the lowest quintiles?
2. Have the real incomes in TTWC sectors increased more vis-à-vis non trade sectors in Khyber Pakhtunkhwa and Balochistan?
3. Do households associated with TTWC sectors have higher mean incomes as compared to households that are not associated with TTWC sectors in Khyber Pakhtunkhwa and Balochistan?

Two focus group discussions were conducted to gain an understanding into possible economic and security risks for Pakistan in the post-2014 Afghanistan milieu. The first group - which focused on economic impacts - was composed of representatives from the Ministry of Commerce, economic think tanks who have worked closely on issues related to
Art. 6, page 10 of 16
Shabbir and Ahmed: Welfare Impacts of Afghan Trade on the Pakistani Provinces of Balochistan and Khyber Pakhtunkhwa

Afghanistan-Pakistan relations, traders and producers who have been trading actively with Afghanistan, senior journalists, and chamber of commerce members. The second group focused on security risks for Pakistan and was composed of security analysts (including retired army generals), senior journalists, and members of economic think tanks. The findings of these sessions were then processed using a qualitative analysis tool called NVivo.

Results and Tables

Quantification of Welfare Impacts

Household Characteristics

In Table 2 we compare employment levels in TTWC sectors for Khyber Pakhtunkhwa and Balochistan between the years 2004–05 and 2010–11. Other prominent characteristics of these households are also provided. A cursory look at these descriptive statistics reveals that the number of households associated with TTWC sectors has grown substantially during this period: 290 per cent in Khyber Pakhtunkhwa and 460 per cent in Balochistan. In both provinces monthly per capita consumption by households associated with these sectors doubled. We also note that employment levels in TTWC sectors are very near to the traditional agriculture and service sectors in these two provinces. Both regions lack industrial infrastructure and therefore manufacturing activity is less prominent here than in other parts of Pakistan.

We also note in Table 3 that the per capita incomes across both provinces neighbouring Afghanistan increased in both nominal and real terms. More important is to note that non-trade incomes remained lower than incomes associated with the trade sector.

Poverty reducing impact of trade

We understand that growth in TTWC sectors will only impact the poor favourably if there is job creation for the lowest income

<table>
<thead>
<tr>
<th>Variables</th>
<th>Khyber Pakhtunkwa</th>
<th>Balochistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households in trade, transport, warehousing, and communication (TTWC) sectors</td>
<td>586</td>
<td>2,287</td>
</tr>
<tr>
<td>Sample population dependent on TTWC</td>
<td>3,926</td>
<td>15,094</td>
</tr>
<tr>
<td>Actual number of households the sample represents in TTWC</td>
<td>209,286</td>
<td>737,742</td>
</tr>
<tr>
<td>Actual population the sample represents (TTWC)</td>
<td>981,550</td>
<td>2,515,700</td>
</tr>
<tr>
<td>Monthly per capita consumption (food)</td>
<td>1133</td>
<td>2731</td>
</tr>
<tr>
<td>Key sources of occupation (no. of HHs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry &amp; Fishing</td>
<td>630</td>
<td>2714</td>
</tr>
<tr>
<td>Social and Personal Service/ Education</td>
<td>455</td>
<td>727</td>
</tr>
<tr>
<td>Wholesale &amp; Retail trade</td>
<td>435</td>
<td>1310</td>
</tr>
<tr>
<td>Construction</td>
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<td>1357</td>
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<tr>
<td>Land Transport</td>
<td>151</td>
<td>720</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>8.6</td>
<td>9.14</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>81</td>
<td>72</td>
</tr>
</tbody>
</table>

Table 2: Salient features of Households (HHs) in Khyber Pakhtunkhwa and Balochistan.
Source: WDI and authors own calculations from HIES 2004-05 and 2010-11.
We see in Tables 4 and 5 that this is precisely the case. The highest increase in employment is seen in the 1st and 2nd income quintiles (poorest segments). These increased employment levels in the poorest quintiles are seen for both Khyber Pakhtunkhwa and Balochistan provinces. We should also note here that these calculations do not accurately represent employment in the informal sector in TTWC, which has also grown immensely as a result of the formal sector’s growth.

There is evidence that while the TTWC sector has expanded in both conflict-ridden provinces (disproportionately benefiting poor households), substantial contraction has been seen in manufacturing activity. The Asian Development Report of 2010 entitled ‘Post-Conflict Needs Assessment’ explains that terrorism-related threats have brought several industries to a complete standstill. Furthermore, several manufacturing and processing industries, including mining, are now operating at less than 10 per cent of pre-conflict levels.

More worrying is that agriculture and livestock, traditionally a principle source of livelihood for the local population in these two provinces, are now vulnerable to conflict and local political instability (Pasha 2013). Despite several investment exhibitions in various parts of Pakistan, domestic investors are not inclined to invest in agriculture and livestock processing in Khyber Pakhtunkhwa and Balochistan.
Regression results

Our aim in this section is to see the role of the TTWC sector in overall household level incomes in Balochistan and Khyber Pakhtunkhwa. While the log of household incomes is the dependent variable, our independent variables include household-level characteristics such as education, age, region, access to information, assets owned by the household, number of persons in a household, and whether the household is associated with TTWC sectors. The regression equation is as follows:

\[ \ln Y = \beta_0 + \beta_1 \text{age} + \beta_2 \text{age}^2 + \beta_3 \text{education} \]
\[ + \beta_4 \text{telephone} + \beta_5 \text{motorcycle} + \beta_6 \text{tv} \]
\[ + \beta_7 \text{npers} + \beta_8 \text{httwc} + \beta_9 \text{urban} + \varepsilon \]

Where \( Y \) is the cumulative income of the household, \( \text{age} \) refers to the age of the head of the household, \( \text{education} \) is the number of years of education the head of the household has completed, \( \text{telephone} \) is a binary variable which is 1 if the household owns a telephone, \( \text{motorcycle} \) is a binary variable which is 1 if

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 2848</th>
</tr>
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<tr>
<td>Model</td>
<td>464.021396</td>
<td>9</td>
<td>51.5579329</td>
<td>F( 9, 2838) = 87.68</td>
</tr>
<tr>
<td>Residual</td>
<td>1668.89545</td>
<td>2838</td>
<td>.588053364</td>
<td>Prob &gt; F = .00000</td>
</tr>
<tr>
<td>Total</td>
<td>2132.91684</td>
<td>2847</td>
<td>.749180486</td>
<td>R-squared = .2176</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adj R-squared = .2151</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Root MSE = .76685</td>
</tr>
</tbody>
</table>

**Figure 3:** Regression Results for 2004-05.

The Ordinary Least Square (OLS) estimates for both years are shown in Figure 3 and 4. We can observe that in both provinces and for both time periods overall household incomes are positively and significantly impacted if the households belong to occupational sectors under TTWC.

Perceptions on Economic & Security Risks

The data from the two focus group discussions on economic and security implications were analysed using NVIVO software. The frequency of the word ‘India’ yielded major concerns about the role of India in the region after the exit of ISAF. As seen in Figure 5 below, the trader community, which has good relations with the Afghan locals and their markets, were most concerned about
As a member of the trader community commented:

... interest was observed when the Indian government facilitated the correspondence of tender agreements between Indian companies and Afghanistan's government.

Pakistani manufacturing and economic think tanks were moderately concerned about competition from India penetrating Afghan markets. One of the participants said, 'We have a comparative advantage over India due to logistics.' The government and the media did not consider India to be a threat to the Pakistani economy. Even though Iran has...
Shabbir and Ahmed: Welfare Impacts of Afghan Trade on the Pakistani Provinces of Balochistan and Khyber Pakhtunkhwa

Steel and cement demand has already been reduced. The trade route has also been diverted through Iran. But where is the major impact?

The security analysts unequivocally expressed their concerns over Indian involvement in the peace of the region post-2014 as shown in Figure 6. One of the discussants said, 'The Indians ignore Pakistan. The economies of India and Pakistan are completely different. India has a much bigger purse.' On inquiring about the interests of the Pakistani army regarding trade with India the security analyst remarked that 'The army is on board to trade with India. You cannot go on forever isolating yourself from the region.' Representatives from the media were the only other participants to append to the concerns of the security analysts. A media representative urged, 'A national decision is required about India and Pakistan on whether we should proceed with bilateral or trilateral relations. How far is it important for us to sell the argument that western unrest affects relations with India?' The producers and economic think tanks representatives did not participate during the security discussion.

Conclusion

This paper establishes two key conclusions. NATO cargo and commercial trade with Afghanistan is important for the large portion of Pakistan’s population employed in the trade, transport, warehousing, and communication sectors. During the period 2004–2011 employment in Balochistan and Khyber Pakhtunkhwa provinces increased in TTWC sectors. This increase in employment was particularly significant in the poorest quintiles.

During the same period real incomes in TTWC sectors increased more vis-à-vis non-trade sectors in Khyber Pakhtunkhwa and Balochistan. We also know from the secondary literature that the trade sector in these provinces has a higher mean income vis-à-vis non-trade sectors. Similarly, the income gap between trade and non-trade sector widened in favour of trade sectors.

Afghan refugees sheltered in Pakistan currently number well above three million and this number was expected to rise significantly following Pakistan military operations in North Waziristan in June 2014 and the exit of ISAF from Afghanistan in 2015.

Change of governments in Afghanistan, India, Iran, and Pakistan provide a renewed opportunity to revive diplomatic negotiations.
after a long period of stagnation. The employment vacuum that will likely form in Khyber Pakhtunkhwa and Balochistan after the NATO drawdown could be filled by increased transit trade to Afghanistan from India. Pakistan as a corridor economy should cash in on its geographical location, an inherent competitive advantage it possesses over Iran. Rigid foreign policies must now be revisited to encourage greater trade and investment cooperation, in turn paving the way for dialogue on other issues. Despite persistent efforts to enhance regional cooperation we are still far from the target. Peace and security remain imperative for the smooth flow of merchandise and people across the region. The issue of security cannot be solved by the efforts of a single country but needs rather to be dealt with collectively as a region; this does not seem likely to happen in the immediate future. The governments of Pakistan and Afghanistan should work in harmony to overcome the economic and security challenges shared by both countries.

Notes
1 Madrassas are institutes for religious education.
2 Because of the sensitivity of the border area between Afghanistan and Pakistan, trading consignments were often damaged or stolen. Therefore, there are multiple insurance guarantees on goods traded as well as on the trucks transporting these goods. Furthermore, it was decided to not allow open consignments to flow from these borders to minimize theft of goods. These open consignments are called “non-containerized” carriages. Containerized carriages have proper seals that are broken at the destination of exports to confirm safety.
3 This is the population living in households mentioned above.

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