Socio-Economic Impact of Arms Transfers to Developing Countries

Ajit Singh

Abstract

In developing nations, importance placed upon defence spending comes at a social cost. This paper explores the link between developing nations’ arms imports and their impact upon socio-economic factors. The first part of this paper elaborates upon the problem of arms transfers to developing countries. The second part provides case studies of Colombia, Egypt, Eritrea, India, Iran, Namibia, Pakistan, Venezuela, and Vietnam. The comparative analysis demonstrates that arms imports have a negative impact upon developing nations. GDP per capita spent upon arms imports usually has the strongest impact upon socio-economic factors, though conflict status and regional stability are also influential.

Part I. Introduction

This part of the paper will provide a general background about the problem of arms imports to developing nations. This part will elaborate upon the origins of arms transfers, define socio-economic indicators, and reconcile the two by providing a methodology for further discussion.

a. Origins

The supply side of the global arms trade is no secret. The largest producers and exporters are developed countries, the top six in 2005 being: United States, Russia, France, United Kingdom, China, Germany and Italy. The largest recipients tend to be in the developing world, with Taiwan, Saudi Arabia, Turkey, South Korea, China, India being the top six importers in 2005. This poses a very important question: why is it that the developed nations, with more development and economies, are exporting arms to developing nations, countries which lack infrastructure and development? The most fundamental problem in this dynamic is that developing nations, with low human development index ratings, are prioritizing arms over development. This paper will address the impact of arms imports upon socio-economic factors in developing countries.

b. Socio-Economic Dimensions

The term socio-economic is a bit problematic as it could mean several different things. For the purpose of this paper, the term will be used synonymously with human development index (HDI). The HDI will provide a measure of the well being of the general population of a nation. The HDI will also be used comparatively to measure the relationship between socio-economic strength and arms imports.

c. Methodology

In order to further analyze the relationship between arms transfers and socio-economic
factors, three types of charts were created. The first chart illustrates the level of arms imports, and monetary expenses spent on arms transfers. The second chart helps to evaluate socio-economic standards based upon the HDI, life expectancy, adult literacy, and GDP. A final grouping of charts was created to aid in the comparative analysis of the impact of arms imports on socio-economic factors based upon the conflict situation of the country (inter-state conflict, intra-state conflict, or no-conflict).

Part II. Case Studies
This part of the paper will provide comparative case studies of Colombia, Egypt, Eritrea, India, Iran, Namibia, Pakistan, Sudan, Venezuela, and Vietnam. The countries which were selected for the case studies were based upon achieving as wide a sample group as possible in order to understand the impact of arms transfers upon socio-economic factors. In selecting the countries for case studies the following was taken into consideration: (1) region, (2) conflict status, (3) level of arms transfers, (4) and available data. Finally, each nation was further analyzed in order to provide a qualitative analysis to complement the quantitative data.

Table 1. Developing Nations Arms Imports and Human Development

<table>
<thead>
<tr>
<th>Country</th>
<th>Arms Imports</th>
<th>Ranks</th>
<th>Per Capita</th>
<th>Percentage of GDP (per $1000)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>$17 million</td>
<td>62</td>
<td>0.396</td>
<td>0.06</td>
<td>77</td>
</tr>
<tr>
<td>Egypt</td>
<td>$398 million</td>
<td>11</td>
<td>5.135</td>
<td>1.258</td>
<td>37</td>
</tr>
<tr>
<td>Eritrea</td>
<td>$382 million</td>
<td>12</td>
<td>81.799</td>
<td>91.96</td>
<td>5</td>
</tr>
<tr>
<td>India</td>
<td>$2.375 billion</td>
<td>1</td>
<td>2.199</td>
<td>0.716</td>
<td>48</td>
</tr>
<tr>
<td>Iran</td>
<td>$1.5 billion</td>
<td>7</td>
<td>4.161</td>
<td>0.548</td>
<td>38</td>
</tr>
<tr>
<td>Namibia</td>
<td>$53 million</td>
<td>45</td>
<td>0.423</td>
<td>3.591</td>
<td>9</td>
</tr>
<tr>
<td>Pakistan</td>
<td>$344 million</td>
<td>6</td>
<td>2.118</td>
<td>0.99</td>
<td>39</td>
</tr>
<tr>
<td>Sudan</td>
<td>$270 million</td>
<td>10</td>
<td>6.719</td>
<td>3.544</td>
<td>27</td>
</tr>
<tr>
<td>Venezuela</td>
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<td>69</td>
<td>0.473</td>
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<td>75</td>
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<tr>
<td>Vietnam</td>
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<td>2.957</td>
<td>1.087</td>
<td>42</td>
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</table>

Table 2. Developing Nations Human Development

<table>
<thead>
<tr>
<th>Country</th>
<th>HDI</th>
<th>Rank</th>
<th>Life Expectancy</th>
<th>Adult Literacy</th>
<th>GDP per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>0.790</td>
<td>70</td>
<td>72.6</td>
<td>92.8</td>
<td>7,256</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.702</td>
<td>111</td>
<td>70.2</td>
<td>71.4</td>
<td>4,211</td>
</tr>
<tr>
<td>Eritrea</td>
<td>0.454</td>
<td>157</td>
<td>54.3</td>
<td>n/a</td>
<td>977</td>
</tr>
<tr>
<td>India</td>
<td>0.611</td>
<td>126</td>
<td>63.6</td>
<td>61</td>
<td>3,139</td>
</tr>
<tr>
<td>Iran</td>
<td>0.746</td>
<td>96</td>
<td>70.7</td>
<td>77</td>
<td>7,525</td>
</tr>
<tr>
<td>Namibia</td>
<td>0.626</td>
<td>125</td>
<td>47.2</td>
<td>85</td>
<td>7,418</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.539</td>
<td>134</td>
<td>63.4</td>
<td>49.9</td>
<td>2,225</td>
</tr>
<tr>
<td>Sudan</td>
<td>0.516</td>
<td>141</td>
<td>56.5</td>
<td>60.9</td>
<td>1,949</td>
</tr>
<tr>
<td>Venezuela</td>
<td>0.784</td>
<td>72</td>
<td>73</td>
<td>93</td>
<td>6,048</td>
</tr>
</tbody>
</table>
a. Colombia
Although Colombia is in the midst of a civil war, it maintains a middle level HDI, the highest out of the sample group, a close second in life expectancy and adult literacy, and the highest GDP per capita. Baring these figures in mind, out of the sample group, Colombia also spent the second least on arms imports, and the lowest per capita and percent of its GDP. The connection between low arms imports and a high HDI in relation to the sample group is visible through Colombia’s statistics. Colombia had a low arms import number, the second lowest out of the entire sample grouping, and the highest HDI. However, Colombia ranked the highest in the world in kidnapping, crime per capita, and second for firearms murders. Colombia also ranked 70th in the world for health expenditures. Colombia held the 14th highest amount of the world’s poor with 0.76%. Based upon these statistics, though some socio-economic factors are very weak, it appears that Colombia has balanced its military and socio-economic interests, at least more so than other nations in this study.

b. Egypt
Egypt is a nation which is highly militarized, ranking 11th in arms imports yet 111th in its HDI. This is quite an astounding contrast between its prioritization of arms imports over social programmes. The numbers show that Egypt invests heavily into its arms imports, but its adult literacy remains relatively low, though its life expectancy is at a moderate level for the sample group (5th). Egypt had a high level of arms imports, with a very low level of HDI. This relationship demonstrates an explicit link between high expenses on arms results in a lower standard of living. Egypt appears to have the second highest conviction rate in the world, and the fifth highest percentage income inequality for the poorest 10%. Egypt also ranked 111th in world on health expenditures. Egypt held the 33rd greatest number of poor people in the world with 0.18%. It is obvious from these statistics that Egypt’s socio-economic problems are being placed behind its military interests, due to the fact that their arms imports numbers were far higher.

c. Eritrea
One of the strongest demonstrations of the link between arms imports and socio-economic factors comes from Eritrea. Eritrea was found to be spending the highest amount of its GDP per capita on arms imports, than any other nation. Continuous tension with Ethiopia may play a large role in this militarization. The two nations fought a war between 1998 to 2001 leading to an unstable conclusion with the 2000 Algiers Agreement. The 2000 Algiers Agreement led to a Boundary Commission ruling in favour of Eritrea, which Ethiopia rejected. This conflict has resulted in aggravation of already large socio-economic problems in both nations. Eritrea comparatively ranked in the bottom tier of the HDI rankings, with an extremely low life expectancy rate, and its adult literacy rate not being reported. Furthermore Eritrea is considered a high risk area for bacterial diarrhea, hepatitis A, malaria, and typhoid fever. It can easily be inferred from the data that socio-economic conditions are being sacrificed for the sake of Eritrea’s arms imports. The conflict with Ethiopia has resulted in the heavy militarization of Eritrea. It should be noted that Eritrea spends 17.70% of it’s GDP on military expenses, the highest in the world. It also had the 33rd highest HIV/AIDS rate in the world. Furthermore the BBC reports that the Eritrean government has been unable to provide food as two thirds.
of the population receives foreign food aid. Also, a large part of the labour force in Eritrea is composed of the army. Eritrea also remains 157th place for health expenditures.

d. India
India is another nation that is highly militarized, in a perpetual state of armed conflict with its neighbor Pakistan. India’s HDI is extremely low, yet it is ranked first in the world in terms of arms imports. The visible prioritization of arms over social programmes is evident since its HDI rank is a dismal 126 in contrast to its first place finish in arms transfers. Both India’s adult literacy and life expectancy were starkly lower than other nations. A direct correlation can be drawn from India’s socio-economic conditions and its arms imports. Perhaps a reason for this discrepancy is its state of insecurity due to long standing armed inter-state conflict and arms race with neighboring Pakistan. India ranked 75 out of 101 countries with its average adult having 5.1 years of education. India also ranks 126 in health expenditures in the world. India appears to be another high risk nation for bacterial diarrhea, hepatitis A and E, typhoid fever, dengue fever, malaria, Japanese encephalitis, and rabies. India also holds the title of having 41.01% of the world’s poor, the highest in the world. India’s prioritization of arms over socio-economics is very visible.

e. Iran
Iran has been in a process of nuclearization, declaredly for civilian use, though contested by other nations. Notwithstanding the heavy toll the population has paid for sanctions placed upon Iran for its pursuit of nuclear technology outside the IAEA framework, Iran ranks seventh in the world for arms imports with an astounding $1.5 billion, though that number was third last in the sample group in terms of its percentage of GDP. Though Iran held the highest GDP per capita, it ranked below Colombia and Venezuela on socio-economic factors, and a moderately low adult literacy. This analysis demonstrates that it is due to its allocation of funds that it is not achieving as high socio-economic conditions as other nations who have a lower GDP per capita (Colombia, Venezuela). Iran is the seventh leading arms importer in the world, though maintains a fairly moderate HDI rank. This discrepancy could be explained by Iran’s large oil exports, the country ranks third in oil production and reserves. The large oil industry in Iran allows the government to allocate large funds towards arms imports, but also provide a significant amount towards social programming. An example of this is that it ranks third in the world for the immunization of newborns for hepatitis B. Iran ranked 96th in the world for health expenditures.

f. Namibia
Namibia provided for a very interesting case. Though its arms imports were not relatively high compared to other nations, overall, a more nuanced analysis demonstrated a very interesting discovery. Namibia placed ninth overall for the percentage of its GDP spent upon arms imports, as well as for its per capita expenditures on arms imports. Furthermore Namibia placed 125 in its HDI ranking, the lowest out of the sample group for life expectancy. An interesting note about Namibia was that, though its overall arms import dollars were relatively low, it ranked ninth in terms of percentage of GDP spent on arms imports. This development comes from a nation which is under no immediate threat of war, and with an extremely low life expectancy. Even with this lack of emphasis on socio-economic programming, funds allocated towards arms imports were extremely high.
Namibia also ranked 125th in the world in health expenditures. Namibia also has the sixth highest HIV/AIDS rate in the world at 21.30%, in addition to the 50th most poor people in the world with 0.06%, even with its small country size of just over two million.

g. Pakistan
In a constant arms race with India, Pakistan holds sixth place in terms of arms imports, yet a ranking of 134 for HDI. In terms of per capita and GDP percentage spent on arms imports, the number is moderately high. Pakistan’s average adult had 3.9 years of schooling, 75th out of 101 countries. Pakistan also ranks 134th in the world for health expenditures. Pakistan is considered a high risk for several diseases including bacterial diarrhea, hepatitis A and E, typhoid fever, dengue fever, malaria, and cutaneous leishmaniasis. Pakistan is the country with the fourth largest percentage of the world’s poor with 3.86%. The high level of arms imports, coupled with low HDI and high disease risk demonstrates that Pakistan’s investment into arms imports comes at high socio-economic costs.

h. Sudan
Sudan is another nation which has invested heavily into arms imports. It should be noted that the arms import numbers are quite high considering an illicit flow of arms continues into Sudan, even despite a UN arms embargo. Even with this embargo, Sudan sits as the 10th leading arms importer, and 10th for expenditures on arms imports as percentage of its GDP. Sudan’s socio-economic factors are also low, ranking second last out of the sample group for HDI, and very low in adult literacy and life expectancy. It truly appears that arms expenditures are being prioritized over social programmes, leading to a negative impact upon socio-economic factors. Sudan is very visible in the media due to its intra-state conflicts, most notably the crisis in Darfur. The situation in Darfur has been called a “humanitarian crisis”. Even with an arms embargo in place, Sudan has managed to get a large amount of arms through its borders, as it is the 10th largest arms importer in the world. Sudan also has the 44th highest unemployment rate out of 198 countries. More striking was the fact that the average adult in Sudan had just two years of school, 96th out of 101 countries. And Sudan is ranked 141st in ranking for health expenditures. The lack of focus on socio-economic issues in favour of arms imports has had a huge negative impact upon the socio-economic factors in the nation.

i. Vietnam
Vietnam appeared to be at the high middle range of sample group for arms imports (27) HDI rank (109), and life expectancy. Surprisingly its adult literacy rate was very high given that the other nations with higher HDI’s had lower adult literacy rates. Vietnam surprisingly invested a significant amount into arms imports. Interestingly it had a high adult literacy rate. Vietnam ranked a surprisingly high 20th in per capita GDP expenditures on arms imports, and 27th overall. This is coupled with the fact that Vietnam ranks 109th in the world in health expenditures. This coming with the fact that it is a high risk for bacterial diarrhea, hepatitis A, typhoid fever, dengue fever, malaria, Japanese encephalitis, plague, rabies, and leptospirosis. It appears that avian influenza is also becoming a risk in Vietnam. Once again the focus of Vietnam on arms import appears to have de-prioritized socio-economic issues, especially health.

j. Venezuela
Hugo Chavez’s Venezuela is in a rapid process of militarization as well. Though it ranks
the lowest out of the sample group in terms of arms imports, another study says that it secured $1.9 billion in arms transfer agreements in 2005 alone (fifth in the world).\textsuperscript{49} Venezuela had the second lowest arms imports, along with the second highest HDI rank out of the sample group. Out of the non-conflict ridden nations, Venezuela fared the best, with the highest life expectancy and adult literacy. This should demonstrate a correlation between arms import numbers and socio-economic factors. Venezuela ranked 72\textsuperscript{nd} in the world in health expenditures, and 69\textsuperscript{th} in arms imports.\textsuperscript{50} This, similar to Colombia, is a demonstration of the capability to balance arms interests with socio-economic concerns, at least within the sample group. Venezuela came in 22\textsuperscript{nd} largest amount of the world’s poor with 0.51\%.\textsuperscript{51} Though Venezuela fared better than all but Colombia on HDI factors, it was nevertheless below medians for the world.

\textbf{Part III. Analysis}

Based upon the statistics found above, a closer analysis will be given of the sample countries. The analysis will encompass three parts: inter-state conflict countries (Eritrea, India, and Pakistan), intra-state conflict countries (Colombia and Sudan), and nations in non-conflict zones (Venezuela, Iran, Vietnam, and Namibia). The basis of the analysis should provide a comparative insight into the socio-economic impact of arms imports on countries based on region, size, conflict conditions, and more.

\textit{a. Inter-state conflict countries}

\textbf{Table 3. Nations in Inter-State Conflicts}

<table>
<thead>
<tr>
<th>Country</th>
<th>Arms Imports</th>
<th>Rank</th>
<th>HDI Rank</th>
<th>Life Expectancy</th>
<th>Adult Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eritrea</td>
<td>$382 million</td>
<td>12</td>
<td>0.454</td>
<td>157</td>
<td>n/a</td>
</tr>
<tr>
<td>India</td>
<td>$2.375 billion</td>
<td>1</td>
<td>0.611</td>
<td>126</td>
<td>61</td>
</tr>
<tr>
<td>Pakistan</td>
<td>$344 million</td>
<td>6</td>
<td>0.539</td>
<td>134</td>
<td>49.9</td>
</tr>
</tbody>
</table>

The first broad groups of countries to be analyzed are those in the midst of inter-state conflicts: Eritrea (with Ethiopia), India, and Pakistan. These nations state that their pressure to import arms is due to their state of insecurity. This argument comes at the expense of social programming as this grouping of nations had the worst HDI ranks, especially vis-à-vis the amount the spent on arms imports. The obvious deduction from these statistics is that nations in the midst of conflicts have their socio-economic factors suffer the most from arms imports.

\textit{b. Intra-state Conflicts}

\textbf{Table 4. Nations in Intra-State Conflicts}

<table>
<thead>
<tr>
<th>Country</th>
<th>Arms Imports</th>
<th>Rank</th>
<th>HDI Rank</th>
<th>Life Expectancy</th>
<th>Adult Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>$17 million</td>
<td>62</td>
<td>0.790</td>
<td>70</td>
<td>72.6</td>
</tr>
<tr>
<td>Sudan</td>
<td>$270 million</td>
<td>10</td>
<td>0.516</td>
<td>141</td>
<td>56.5</td>
</tr>
</tbody>
</table>
Among the countries analyzed who were in the midst of inter-state conflicts are Colombia and Sudan. These countries justification for importing arms is in order to overcome internal rebellions. There appeared to be a significant discrepancy between the two nations studied, which may be accounted for different regions, intensity of conflict, or other factors. An interesting observation is that Colombia invested significantly less than Sudan on arms imports, and ranked significantly higher on HDI. Sudan conversely, as the 10th highest arms importer, had an extremely low HDI rank, as well as life expectancy and adult literacy. The contrast between these two nations should demonstrate the negative relationship which arms transfers have upon socio-economic factors.

c. Non-Conflict

Table 5. Nations in Non-Conflict Zones

<table>
<thead>
<tr>
<th>Country</th>
<th>Arms Imports</th>
<th>Rank64</th>
<th>HDI66</th>
<th>Rank67</th>
<th>Life Expectancy68</th>
<th>Adult Literacy69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>$398 million</td>
<td>11</td>
<td>0.702</td>
<td>111</td>
<td>70.2</td>
<td>71.4</td>
</tr>
<tr>
<td>Iran</td>
<td>$1.5 billion</td>
<td>7</td>
<td>0.746</td>
<td>96</td>
<td>70.7</td>
<td>77</td>
</tr>
<tr>
<td>Namibia</td>
<td>$53 million</td>
<td>45</td>
<td>0.626</td>
<td>125</td>
<td>47.2</td>
<td>85</td>
</tr>
<tr>
<td>Venezuela</td>
<td>$12 million</td>
<td>69</td>
<td>0.784</td>
<td>72</td>
<td>73</td>
<td>93</td>
</tr>
<tr>
<td>Vietnam</td>
<td>$247 million</td>
<td>27</td>
<td>0.709</td>
<td>109</td>
<td>70.8</td>
<td>90.3</td>
</tr>
</tbody>
</table>

The final grouping of nations is those who are not involved in a significant inter-state or intra-state conflict. In general, these nations have very little justification to arm themselves other than national security concerns. Interestingly, once again, the country that invested the least in arms imports, Venezuela, ranked the highest in HDI. However an exception occurred when Iran ranked the highest in arms imports but ranked the second highest in HDI, though its life expectancy and adult literacy were very low. It shows that non-conflict nations demonstrate a high disparity between prioritizing arms imports with other socio-economic interests.

d. Summary

Based upon the statistics it appears that, as can be presumed, nations involved in inter-state armed conflicts must prioritize arms over socio-economic concerns, which in turn led to a severely negative impact upon the latter. The results of states within inter-state conflicts appeared to be fairly consistent. In intra-state conflicts, there appeared to be a variance between the emphasis they place upon arms imports and socio-economic concerns. The difference may possibly be accounted for due to regional security, as for example Colombia, with a high HDI yet lower arms imports come from a region of relative security. Conversely, Sudan, with higher arms imports and lower HDI, comes from a very volatile region which includes neighbouring conflicts in Ethiopia, Uganda, Central African Republic, and Chad.

Similar to the findings in intra-state conflicts, nations in non-conflict zones appear to vary in the importance they place upon arms imports, though regional insecurity may account for this disparity. Non-conflict zones appear to have the greatest variance in terms of arms imports and HDI rank. However, an interesting observation provided by the statistics
showed that the higher the percentage of GDP spent on arms imports, the lower the HDI rank. Given these results, it appears that the greatest indicator of the negative impact of arms imports and socio-economic factors depends upon the percentage of GDP spent on arms imports. The greater the percentage of GDP nations spend upon their arms imports, the greater the negative impact upon socio-economic conditions. For instance, Eritrea ranked first in percentage of GDP spent on arms imports but also ranked near the bottom for HDI ranking. As mentioned above Namibia is another example of this relationship between percentage of GDP and socio-economic conditions.

**Part V. Conclusion**

In conclusion, it appears the greatest link between arms imports and socio-economic factors can be found through the lens of percentage of GDP spent upon arms imports. The statistics show that the greater the percentage of a national GDP spent upon arms transfers, the lower the HDI of the nation ended up being, negatively affecting adult literacy, life expectancy, and other factors. The intensity and regional security of a nation is also a factor which influences the amount it will spend upon arms imports. Based upon these finding, arms imports to developing nations have a significantly negative impact upon socio-economic factors.

**Footnotes**

3The reason that the HDI is being used as a measure of socio-economic value is because of its comprehensive approach encompassing life expectancy, literacy, education, and standard of living.
5Ibid.
7Ibid.
9Ibid.
11Ibid.
12Ibid.
13Ibid.
14Ibid.
16Watkins, p.302.
19Watkins, p.303.
20Nation Master, “Share of All Poor People by Country”, Nation Master, accessed 16 February 2007,

22Ibid.


27Ibid.

28Watkins, p.303.

29Ibid.


33Ibid.

34Watkins, p.302.


39Watkins, p.303.


46Watkins, p.303.

47Ibid.


49Grimmett, p.57.

50Watkins, p.302.

51Nation Master, “Share of All Poor People by Country”, Nation Master, accessed 16 February 2007,
52 Nation Master, “Conventional Arms Imports by country”, Nation Master, accessed 16 February 2007,
53 Ibid.
54 Watkins, pp.283-6.
55 Ibid.
56 Ibid.
57 Ibid.
58 Nation Master, “Conventional Arms Imports by country”, Nation Master, accessed 16 February 2007,
59 Ibid.
60 Watkins, pp.283-6.
61 Ibid.
62 Ibid.
63 Ibid.
64 Nation Master, “Conventional Arms Imports by country”, Nation Master, accessed 16 February 2007,
65 Ibid.
67 Ibid.
68 Ibid.
69 Ibid.

About the Author

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