

International Trade and Good Jobs: A case study of Sri Lankan Manufacturing

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Abstract

‘Good jobs’ involve premium earnings and individual well-being. This paper examines the location of ‘good jobs’ in manufacturing paying special attention to international trade and innovative human resource management (HRM) practices at firm level. The definition of ‘good jobs’ is based on wage premiums above industry average paid to skilled workers and factors leading to overall job satisfaction e.g. individual well-being. Statistical evidence based on firm level data indicates firm heterogeneity (e.g. labour productivity, efficient scale of production, firm size, skill intensity, sub-contracting, and geographic location) and links with global production system (e.g. use of imported raw-material, R&D intensity and exporting) as key determinants of ‘good jobs’ in manufacturing. The findings support ‘Skill-Enhancing-Trade hypothesis’ rather than Hechsher-Ohlin and Stolper-Samuelson hypothesis. The case study evidence of large scale and small & medium scale firms reveal training and development, team building, recognition, incentive schemes and work-life balance as effective strategies of creating good jobs in manufacturing. The findings of the study point to policy failures as a major constraint on creation of ‘good jobs’ in manufacturing.

Keywords: trade, good jobs, premium wages, job satisfaction, global production network.

1. Introduction

Jobs have taken a centre stage in policy debate of Sri Lanka over the past 46 years. The notion of ‘good jobs’ may seem normative but it can easily be defined in terms of basic economic theory e.g. productivity, wages, skill levels, occupation etc. Jobs provide income, recognition, social status, high output, and well-being of job holders. Jobs also affect societies as they impact on household earnings, employment opportunities, productivity of others, poverty reduction, equity and environmental protection. Thus, jobs offer multiple benefits and therefore it is difficult to identify a single type job that can be considered as ‘good jobs’ in all dimensions.

The main purpose of this paper is to examine presence of ‘good jobs’ in manufacturing sector industries based on firm level data covering two major aspects: a) location of ‘good jobs’ in manufacturing and b) human resource management (HRM) practices at firm level in promoting ‘good jobs.’ The paper is structured into six main sections. Section 2 presents a brief note on methodology and Section 3 explains key characteristics of manufacturing industry in Sri Lanka. Section 4 covers analytical framework, the model and statistical evidence on location of ‘good jobs.’ Section 5 presents case study evidence on ‘good jobs’ and Section 5 summarizes the key findings and inferences of the study.

2. Methodology

The study is based on firm level data collected from primary and secondary sources. The primary data set¹ includes 20 large scale (LS) establishments and 25 small and medium scale enterprises (SMEs).² The LS sample covers 15 different industry sub-sectors³ while the SME sample represents 11 sub-sectors⁴ in manufacturing (Annex 1 and 2). The purpose of case studies is to examine inter-firm and inter-industry variations in HRM practices as a strategy to promote ‘good jobs’ in industry. The secondary data set is from the Annual Survey of Industries (ASI) conducted by the Department of Census and Statistics (DCS, 2013), and covers 3755 firms in manufacturing employing more than 5 persons per establishment. This is a cross-sectional analysis on ‘good jobs’ guided by theoretical postulates in industrial organization (IO) and modern trade theory. It is worth analysing both qualitative and quantitative data to gain a better understanding of ‘good jobs’ in industry. The manufacturing sector was selected for the analysis considering its cross-sectional diversity and interactions with the global economy. Sri Lanka presents an interesting case study for the issue under examination due to two main reasons. First, Sri Lanka is well known for its high social indicators (e.g. belong to high human development category with 0.757 in 2015) and it has an impact on creating ‘good jobs’. Second, Sri Lanka is one of the developing economies which took the lead in liberalizing the economy in 1977 and gained substantial economic progress during the post-liberalization period. Over the past two decades however, the policy regimes have gradually shifted more towards control oriented import substitution rather than continuing with pro-market policy reforms. The negative effects of these policy reversals seem to be high on creation of ‘good jobs’ especially in the context of emerging global production sharing (GPS) system of production.

¹ Conducted in November and December, 2015.

² Conducted in March, 2016.

³ Textiles, Apparel, Ship building and repair, Pharmaceutical & Consumer healthcare, Activated Carbon, Plastic Bottles and Caps, Confectionary, Tires, Pumps manufacturing, Coir based products, Printing,

⁴ Roofing tiles, Food products, Apparel, Shoes, Soap, Match Boxe, Printing, Rubber Toys, Pottery, Joss sticks and handicrafts.

Jobs offer multiple benefits to job owners, employers and to the society. The latter covers a range of spillover benefits on the living standards of others, on aggregate productivity, and on social cohesion created through employment, earnings, productivity, poverty reduction, environmental protection and fairness (WB, 2013). In fact, the value of a job to society is far greater than its value to the individual job holder. Given this background we define ‘good jobs,’ considering both monetary and human capital attributes of a job. In monetary terms, it can be defined as jobs which offer higher remuneration than industry average.⁵ The human resource development criteria of good jobs captures several dimensions such as provision of dignity and respect for employee and employer, worker motivation, style of supervision, training and development, reward systems and work-life balance.

Our definition of “good jobs” is based on higher wages paid for skilled workers above the industry average.⁶ The skilled category of employment was selected for this purpose considering the relative magnitude of employment (e.g. 58% of total employment for the past two decades)⁷ and its contribution to productivity. The skilled workers also play a key role in introducing new technology and new product lines. We assume that manufacturing industries linked with international trade would be offering attractive remuneration for workers due to efficiency considerations and competitive pressures in the market.

3. Manufacturing industry in Sri Lanka

Sri Lanka is a small open economy with a per capita income of US\$ 3835⁸ and a labour force of 8.9 Million. Over the past five decades, the economy has transformed from a classical type primary commodity exporting economy to a export led manufacturing and service sector dominant lower middle income economy. Its employment share in agriculture reduced from 50 to 28 percent between 1972 and 2016 while the services sector increased its employment share from 37 to 47 percent during the same period. The employment share of manufacturing increased from 9 to 17 percent between 1972 and 2016. The export share of agriculture reduced from 87 to 23 percent of total exports between 1972 and 2016 while the share of manufacturing exports increased from 3 to 74 percent during the same period. Sri Lanka has diversified its national export basket from 485 products in 1980 to 3,775 by 2014.⁹ This structural transformation was supported with rising real wages in manufacturing. It seems that firms are willing to hire more workers and pay them more in line with their value added contributions.

Structural changes of the Sri Lankan economy since the early 1970s could be attributed to various policy regimes and developments in the global market. In the 1970s the manufacturing sector was operating under a state dominant, close economy policy regime and in 1977, with the change of government, a liberalized policy regime was introduced. It was a pro-market policy support system committed to promote export led-growth through export-oriented foreign direct investment (EOFDI). It continued without any major changes for about 28 years irrespective of the change of governments with different political ideologies. However, industry and trade policy of the new government which came to power in 2005 was characterized by import substitution, application of tariffs and para-tariffs and state participation in business activities. It continued

⁵ A study dealing with “More and Better Jobs in South Asia,” defined better jobs “ as those with higher wages for wage workers and lower poverty level for the self-employed and , secondarily, jobs that reduce the risk of low and uncertain income for the most vulnerable group of workers.” (WB, 2011).

⁶The official poverty line for 2012/13 was Rs. 3,624 per month, which is equivalent to about \$1.50 in 2005 purchasing power parity terms. Accordingly, the average salaries for skilled workers and unskilled workers were 3.4 times and 2.9 times higher than the national poverty line respectively.

⁷ The share of unskilled workers in manufacturing has reduced from 25 to 21 percent between 1995 and 2014.

⁸ US\$1= Rs. Rs.113.90

⁹ Export Development Board, unpublished data.

for about 10 years and the new government which came to power in January 2015 was a coalition with divergent political ideologies and hence unlikely to effectively implement major policy changes. In fact, its trade and industry policy seem to be a continuation of previous policy regime with more political instability.

The manufacturing industries in Sri Lanka operate in an oligopolistic market structure (Figure 2). The four firm concentration ratio (CR4)¹⁰ is over 60 percent for about 73 percent of industry sub-sectors in manufacturing¹¹ at 3-digit level. The CR4 is in the range of 51 to 58 percent for another 11 percent of industry sub-sectors while the CR4 of the rest (16%) varies 19 to 43 percent. The industry sectors closer to competitive market structures include textiles and garments, paper and paper products, rubber, plastics, processing and preserving fish, vegetables and fruits, non-metallic mineral products and other fabricated metal products. Large scale firms (e.g. more than 100 workers) account for more than 70 percent of employment and value added in manufacturing.¹² In terms of export turnover, large scale firms (e.g. exporters over US\$ 7.7 Mns per annum) account for 82% of total exports and 7 percent of exporters. In contrast, small scale exporters (e.g. less than US\$ 0.46 Mns¹³ per annum) account for less than 4 percent of total exports¹⁴ and 77 percent of exporters. The major contributors to manufacturing exports include textiles and garments (41%), rubber and finished products (7.5%), diamonds and jewellery (3%), electronic and machinery parts (3%) and food and beverages (3%).

In Sri Lanka, industries like apparel, textiles, rubber based products, paper and paper products, printing, coir products, food processing, leather, automobile spare parts, and pharmaceuticals have gradually integrated with the global production network through global production sharing (GPS) system.¹⁵ It involves manufacture of parts and components within a fragmented production system and has been increasing much faster rate than trade in final goods. GPS system is based on both 'producer-driven' and 'buyer-driven' chains. The producer driven production chains are typically found in knowledge and technology-intensive industries and run by multinational firms who enjoy distinct comparative advantages in international trade. 'Buyer-driven' chains, on the other hand, are controlled primarily by retailers, marketers and branded manufacturers. Lead firms in these chains have little involvement in production and are primarily engaged in non-production activities such as design and marketing. These chains are usually found in labor-intensive industries. However, the manufacture of parts and components in Sri Lanka is significantly low compared to some of the Asian counterparts¹⁶ and the share does not seem to be increasing adequately (Hewage and Ekanayake, 2016).

The key industrial exporter, textiles and apparel has made a substantial progress through the global value chain (GVC) system of production. Its industrial upgrading can be seen in several areas: introduction of dynamic product lines, development of human capital base and design capabilities, structural shift towards high-value added products, networking with leading brands at global level, forging long-term procurement relations with large firms, development of partnerships with ethically oriented buyers (e.g. M&S, Nike,

¹⁰ Percentage share of top largest four firms in output or value added. It's a standard measure in measuring oligopolistic power of an industry.

¹¹ Out of a total of 55 sub-sectors at 3-digit level

¹² This is an interesting structural feature especially in the context of South Asia. See Hasan and Jandoc, (2015) for details.

¹³ Refers to 2014 data and the exchange rate in 2014 was US\$ 1 = Rs. 130.56.

¹⁴ This is based on Export Development Board definition of SMEs e.g. export turnover up to Rs. 60 Mns (EDB, 2015).

¹⁵ This could be noticed even in other sectors such as tourism, horticulture, ICT etc.

¹⁶ For example, Malaysia and Thailand GVC share in manufacturing in 2012/13 was 63.5% and 46.9% respectively and Sri Lankan share was only 6.2%.

Victoria's Secret),¹⁷ built a strong image of corporate social responsibility, and adherence to compliance audit and improved social and environmental standards (Athukorala and Ekanayake (2014). Some of the leading manufacturers in the apparel industry have developed their own brand and are well positioned in foreign markets.¹⁸

4. Analytical framework, the model and statistical evidence

As argued in Hecksher–Ohlin and Stolper–Samuelson theorems, free trade promotes factor mobility and convergence of factor prices internationally. It argues that the comparative advantages of developing countries are linked with low cost unskilled labour and trade liberalization shifts the composition of employment towards unskilled labour and the wages of unskilled labour tend to increase with the increase in price of export products. Empirical work however, seem to confirm widening wage gap between wages of skilled and unskilled workers due to global engagement of manufacturing firms (Kohpaiboon and Jongwanich, 2014).

The theory of human capital explains the link between skilled labour and productive efficiency particularly in the present context of knowledge based production. The demand for routine work skills is disappearing and critical thinking skills are becoming increasingly important for firms to be efficient and competitive. In international trade literature, this is being tested using skills-enhancing trade (SET) hypothesis. With the emergence of global production sharing systems, the validity of extended the Hecksher–Ohlin and Stolper–Samuelson hypothesis has been challenged by many researchers based on empirical evidence of several developing countries.¹⁹ The SET hypothesis argues that participation in international trade through GPS provides access to foreign markets, new technology (both product and process), new sources of raw-material, skills development, and modern management practices. Through these interrelated channels, developing countries derive several benefits including skills development and higher returns to human capital. This implies high demand for skilled workers due to participation in international trade through GPS.

In line with the above arguments, presence of 'good jobs' in Sri Lankan manufacturing can be tested using several hypothesis developed in industrial organization (IO) theory. Some of the key hypotheses tested in IO literature include oligopolistic power, scale economies, profitability, productivity, firm size, location, and skills intensity. The effect of international trade on creation of 'good jobs' in industry is tested using three main hypotheses: export intensity, R&D intensity and links with GPS.

The influence of oligopolistic market structures on productivity, profitability, exporting, R&D orientation, skills development, wage levels and employee welfare is widely discussed in industrial organization (IO) literature. We propose to measure oligopolistic power of firms using 4-firm concentration ratio (CR4) and expect such firms to offer higher wages and better employee welfare and skill development opportunities for their employees. If these firms are linked with multi-national organizations or linked with foreign supply sources and buyers through the GVC system, the employees are most likely to get foreign training, access to new technology and benefit from most modern human resource management practices. The link between productivity and wages are well established in marginal productivity theory of wages. However, its application has changed significantly with the presence of market imperfections, labour laws, trade unions

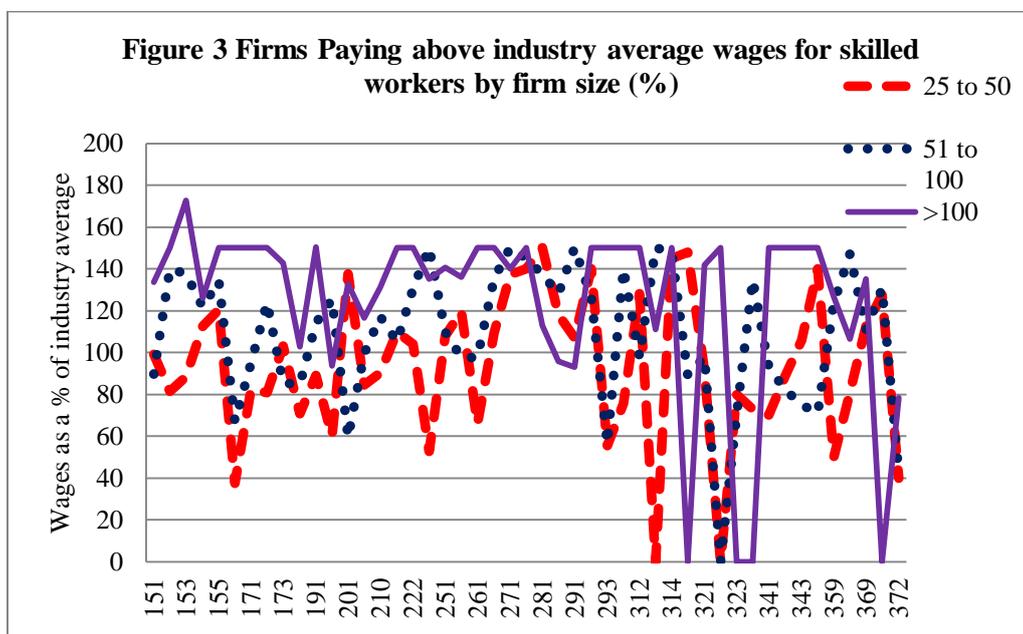
¹⁷ For example, in textiles sector, one of the key players, the Textured Jersey supplies to some of the best international brands including Marks & Spencer, Victoria Secret, Intimissimi, Tezenis and Calvin Klein. The company is backed by two leading industrialists – Pacific Textiles Hong Kong and Brandix Lanka.

¹⁸ "Amanthe", a premier lingerie brand by MAS Holdings

¹⁹ For example see Robbins and Gindling (1999) and Kohpaiboon and Jongwanich (2014).

and firm specific HRM practices. For example, efficiency wage theories argue that firms offer higher wages as a strategy to enhance performance efficiency of the workforce. In the context of Sri Lanka this is plausible given the low level of unemployment (4.2%) and shortage of skilled workers (Dunder et al., 2014 and 2017)

Scale economies is a key factor affecting competitiveness of firms. As argued in micro-economic theory, firms operating at the lowest point of the average cost (AC) curve have the cost advantage over their competitors operating at a higher point of AC curve. In IO literature, this is measured using a proxy variable defined as minimum efficient scale of production (MEPS).²⁰ The firms operating at the minimum point of the AC curve are also in a position to enjoy higher profit margins and capacity to invest more on research & development (R&D), skills development and employee welfare. The standard measure of profitability in IO literature is price-cost margins (PCM)²¹ and a positive relationship is assumed between profitability and premium wages.



Source: DCS, ASI, 2012 unpublished data

Firm size²² is also a plausible hypothesis that can be tested in the context of Sri Lankan manufacturing given the distribution of large, medium and small scale firms. As shown in Figure 3 distribution of ‘good jobs’ can be seen mainly among large and medium scale firms. In certain sub-sectors small scale firms (employing less than 25 persons) also seem to be paying wages above industry average.²³ A comparison of average wages and productivity per worker by form size reveals the wage share of productivity increasing with firm size. For example, the wage share of labour productivity was 8.6 among firms employing 20-39 workers as against 16.7 percent by firms employing more than 100 workers. However, the evidence needs to be analyzed considering several other factors relating to firm heterogeneity and impact of international trade. Except the core production activities, modern firms tend to subcontract various production activities and support services (e.g. transport, communication, storage, cleaning, cafeteria services, etc, to minimize

²⁰ MEPS = average size of firms accounting for top 50% of output as a percent of total output.

²¹ PCM = (Value added-salaries & wages)/total output

²² Measured in terms of employment

²³ This includes Plastic, Glass products, Basic iron & steel, Casting metals, General purpose machinery, Domestic appliances, Electronic motors, Electricity distribution & control, Lighting equipment and Electronic valves & tubes.

operational costs). The validity of this hypothesis can be tested in the context of Sri Lankan manufacturing using services received from local sources (CSR). Considering the cost minimizing effect of subcontracting, a positive impact is expected in creating ‘good jobs’ in manufacturing. Geographic location of firms is a key determinant of firm level efficiency especially in the context of Sri Lanka where development of infrastructure facilities is concentrated in the Western province and few other urban centres. Use of imported raw-materials is a part of GPS system and it functions as a conduit for transfer of technology and modern management practices. It also tends to improve quality of jobs, through compliance audit systems practiced by the GPS. Accordingly, we hypothesize a positive impact of imported raw-materials on wage levels of exporting firms.

Following earlier work by Kohapaiboon and Jongwanich (2014) and Amity and Davies (2011), we define premium wages of y skilled workers as a function of firm heterogeneity and international trade (Eq1 and Eq 2).

$$SKW1 = \beta_0 + \beta_1 CR4 + \beta_2 MEPS + \beta_3 LP SKI + \beta_4 PCM + \beta_5 RAWCLS + \beta_6 LSE + \beta_7 MSE + \beta_8 SSE + \beta_9 REGION + \beta_{10} CSR + \beta_{11} EX + \beta_{12} RDI + \beta_{13} RAWIMP + \beta_{13} SKI + \varepsilon \dots \dots \dots \text{Eq-1}$$

$$SKW2 = \beta_0 + \beta_1 CR4 + \beta_2 MEPS + \beta_3 LP SKI + \beta_4 PCM + \beta_5 RAWCLS + \beta_6 LSE + \beta_7 MSE + \beta_8 SSE + \beta_9 REGION + \beta_{10} CSR + \beta_{11} EX + \beta_{12} RDI + \beta_{13} RAWIMP + \beta_{13} SKI + \varepsilon \dots \dots \dots \text{Eq-2}$$

Where SKW1 = Wage premium earned by skilled workers,²⁴ SKW2 = Wage premiums above industry average,²⁵ CR4= 4-firm concentration, LP = Labour productivity, MEPS = Minimum efficient scale of production, PCM= Price-cost margin, LSE = Large scale establishments (301 + employment), MSE = Medium scale establishments (51-300 employment), SSE = Small scale establishments (11-50 employment), REGION = Geographic location, RAWLCS = Use of local raw material, CSR= Cost of industrial services done by others, EX= Export intensity SKI = Skills intensity, RDI = Research and development intensity, and RAWIMP = Raw material imports.

Table 3 Determinants of ‘good jobs’

	SKSW1		SKSW2	
	Coefficient	Std.Err	Coefficient	Std.Err
INTERCEPT	49.884***	5.109	55.042***	3.908
MEPS	0.744*	0.450	0.856*	0.448
LP	1.610*	1.240	1.640*	9.900
PCM	0.006***	0.001	-0.005*	0.003
LSE	10.941**	4.381	11.856***	4.098
MSE	17.270***	2.777	15.368***	2.258
SSE	3.947*	2.171	1.594	1.862

²⁴ Average wages of skilled workers at firm level relative to average wages of skilled workers in manufacturing.

²⁵ Average wages at firm level relative to average wages in manufacturing.

REGION	14.085***	1.936	10.962***	1.439
RAWLCS	-0.039	0.041	-0.026	0.368
CSR	-0.332*	0.176	-0.208*	0.184
EX	0.159**	0.066	0.097**	0.053
RAWIMPS	0.107**	0.044	0.057	0.041
RDI	0.796***	0.228	2.222***	0.317
SKI	0.118***	0.036	-0.065***	0.024
No. of observations	3755		3755	
R – Squared	0.16		0.30	

Note: ***, ** and * refer to level of significance at 1%, 5%, and 10% respectively.

The regression results provide interesting evidence on creation of ‘good jobs’ measured in terms of premium wages paid to skilled workers (SKSW1) and wages above industry average (SKSW2). Both models indicate the influence of firm specific factors in promoting ‘good jobs’ in manufacturing e.g. efficient scale of production, skill intensity, R&D intensity, and firm size (Table 3). The significant and positive coefficients of labour productivity (LP), efficient scale of production (MEPS) and large scale establishments (LSE) are in line with the theory of the firm and suggests close links between large scale firms and location of good jobs. The 4-firm concentration ratio (CR4) was also positive and significant in both models and reveals the capacity of oligopolistic firms to create ‘good jobs’ in industry. These firms maintain close competition with rival firms through non-price competition (e.g. product differentiation, advertising, CSR, etc.) and offer higher wages and other welfare facilities to attract best workers from the labour market. The statistical evidence on CR4 is not reported in Table 3 due to multicollinearity between MEPS and CR4.

The positive and significant coefficients of geographic location (REGION) and medium scale establishments (MES) show the influence of industry and firm specific factors in promoting ‘good jobs.’ The positive and significant coefficient of REGION variable reveals the capacity of the four districts²⁶ to create ‘good jobs’. These four districts have the comparative advantage of better infrastructure facilities and access to human capital relative to other 21 districts. They also account for about 45 percent of GDP (CBSL, 2016). The validity of subcontracting was tested using two variables: services received from local sources (CSR) and use of local raw material (RAWCLS). Similar to the evidence of Amiti and Cameron (2011), the coefficient of local raw-material consumption is insignificant in both equations. It is to be expected given the poor resource base of Sri Lanka and recent developments in international trade. Large scale firms are dominant in exporting and linked with foreign markets through purchase of raw materials and sale of final goods. The coefficient of CSR (Cost of industrial services done by others) is negative and significant only in skilled workers wage equation. This requires further investigation and perhaps CSR may not be capturing the full effect of subcontracting in manufacturing industry.

Of the three variables employed to capture the influence of GPS in creating ‘good jobs,’ the coefficients of export intensity (EX) and R&D intensity (RD) are positive and significant. Similarly, the positive and

²⁶ Colombo, Gampaha, Kalutara and Kurunegala districts. This is out of a total of 25 districts.

significant coefficient of imported raw materials (RAWIMPS) in skilled wage equation suggests the capacity of firms dependent on imported raw materials to create 'good jobs' relative to others dependent on local raw materials. As noted GPS-led exports are heavily dependent on imported raw material, parts, components, modern technology and decent work practices. It comes as a bundle of inputs to partners in global value chain system and leads to creation of 'good jobs.' The positive and significant coefficient of skills-intensity variable (SKI) in the skilled wage equation shows the close links between good jobs and skilled workers. It also supports the 'skill-enhancing-trade' hypothesis confirmed in the context of Indonesian and Thai manufacturing industries.

A comparison of the results of skilled-wage and average-wage equation models points to four important findings. First, positive and significant coefficients of export intensity and R&D intensity suggests exporting as the way forward for creating 'good jobs' in resource poor small economy of Sri Lanka. Second, positive and significant coefficient of imported raw-material suggests the capacity of GPS oriented production systems to promote 'good jobs' through export-led manufacturing. Third, behaviour of skills intensity variable in the two models indicate the need for skill oriented production systems for creating 'good jobs' rather than continuing with low-skill oriented production systems. Fourth, positive and significant coefficients of oligopolistic market structures (CR4), scale economies (MESP), labour productivity (LP), large scale establishments (LSE) and geographic location (REGION) suggests dominance of firm heterogeneity factors in creating 'good jobs.'

5. Case study evidence on human resource management practices in promoting 'good jobs'

This section presents case study (CS) evidence on industry practices in promoting 'good jobs' paying special attention to wage fixing mechanism, training and development, worker motivation, style of supervision and work-life balance. As stated in section 2, it is based on case study evidence of 45 firms representing large and SME sector industries.

The CS evidence of both samples revealed application of multiple factors on fixing wages at firm level e.g. market wages, technical knowledge and skills, experience, educational qualifications and soft skills. The relative significance of these factors seems to vary by type of occupation, industry sub-sector and size of the firm. For example, technical knowledge & skills, work experience and educational qualifications emerged as key criteria in fixing wages of technical staff attached to LS firms, while the SMEs did not pay much attention to educational qualifications in fixing wages for its technical staff. Both LS and SME firms used market wages, experience and technical knowledge & skills in fixing wages for skilled and supervisory & allied category workers. Wages for semi-skilled and unskilled workers of LS firms were mainly guided by market wages, while the SMEs considered both market wages and work experience.

Investment in human capital development is an important factor in promoting 'good'. The LS firms use on-the job training (OJT), in-house training and external training to develop skills of its work force. LS firms use external training and e-learning to develop skills of managerial/executive and supervisory level staff. They also use OJT and in-house training for skills development of casual/temporary workers. For example, two firms operating in Plastic Bottle and Coir based product manufacturing provide external training for the casual workers as well.²⁷ CS evidence also reveal that firms engaged in textiles and apparel manufacturing are not hiring casual workers due to quality concerns and company specific human resource management

²⁷ The proportion of casual workers in these two firms is (Plastic bottles and coir based products) is 30% and 64% respectively.

practices. The activated carbon manufacturing firm keeps a minimum proportion of casual workers (5%) and does not provide any training for the casual workers. The quality of labour in SME sample was rather low as 30% of the workers had no formal education and another 40 had education up to primary level. The rest are with GCE AL and TVET qualifications. The commitment of SMEs towards training and development however, is limited to OJT and in-house training and targeted at technical, skilled and unskilled workers.

Productivity is a key determinant of competitiveness. The LS firms engaged in exporting seem to apply several strategies to enhance productivity through worker motivation e.g. incentive schemes (e.g. fringe benefits, annual bonus, peak allowance, production and attendance incentives), multi-skills training and job-rotation. As cited by many of the respondent firms, incentive schemes reduce absenteeism and labour turnover. It also makes workers happy as they are being recognized and rewarded for their contribution to enhance operational efficiency of the firm. They also highlighted value of multi-skilled training and job-rotation as effective strategies to strengthen industrial relations and ensure smooth functioning of the entire production system and meeting delivery targets. Among the SMEs, attendance incentives and production incentives emerged as most important strategies for worker motivation. Application of multi-skilling was limited to a few SMEs and it was used mainly to overcome the problem of labour shortages. The CS evidence also point to several other strategies employed by sample firms to promote worker motivation: training and multi-skilling, appreciation awards, long term service awards, grade promotions and career progression for high performers, team building, collective CSR projects and staff welfare.

In addition, giving workers a self-ownership was highlighted by a respondent from apparel manufacturing while another respondent from activated carbon products manufacturing emphasized events with family members as a strategy to assign workers with more responsibility. However, a firm operating in pharmaceutical and consumer products industry did not have any production reward systems and its high efficiency is achieved through daily meetings, talking to staff every day, monitoring performance on hourly basis and by giving the ownership of their own work. This system also includes recognizing high performers at shop floor level on daily/monthly basis under a reward scheme adjudicated by a panel of senior managers. The Production Manager of a pharmaceutical products company stated that “the main thing is to build trust and the relationship between factory staff and management team.” A firm in Ship Building and Repairs sub-sector had the most impressive programme of activities to motivate its staff.²⁸ Another respondent from the apparel industry said “as a supplier we recognize that by treating our employees with respect and allowing them to operate in working conditions that are clean and safe makes a difference in increasing productivity, reducing risk and improving quality.”

²⁸ This included the following. a) Financial motivators - 03 month bonus, Profit sharing (20% with employees), production incentives (for monthly production man hrs.), and attendance allowance, special allowances, annual increments for performance, annual salary increases through collective agreement., b) Housing and vehicle loans at concessionary rates, c) Welfare benefits: Medical insurance (indoor and outdoor claims), welfare loans, free meals (breakfast, lunch dinner evening snacks, tea), scholarships for children (university entrance and grade 05 scholarship), d) Awareness building and attitude development training programs, e) Teambuilding activities /collectivist CSR projects, f) Annual Best Employee awards and recognition, g) Special awards for Innovation, h) Grade promotions and career progression for high performers, i) Giving priority for employees children in recruitments, j) Overseas training opportunities.

Style of supervision is an important variable in creating a positive work culture in an organization. It refers to the way in which the line manager/supervisor interacts with line workers using a combination of individual and organizational value systems. The style of management is strictly hierarchical in majority of CS firms but, there were examples of using team management systems (e.g. multi-skilled teams, problem solving teams, semi-autonomous project teams) in decision making. For example, the allocation of human resources across different tasks by the LS firms was based on multiple criteria such as work experience (e.g. in different product lines.), competency levels, soft skills and commitment. In the case of some LS firms shop floor level work allocation was carried out by task oriented teams instead of seniority.²⁹

Work life-balance is widely discussed in the literature as an important factor in creating 'good jobs'. A respondent from apparel manufacturing stated that "it starts from the top management. We pay attention to welfare of workers and their families. We have annual get-togethers and also company outings. Every time we try and engage workers' family members so that they have a good understanding of the work place. We are also in the process of giving them flexible working hours (only for Executives and above). Free transport for the workers will help them to go home on time. Also morning free food will help them. And if they want they can buy some food for their dinner too from the cafeteria. We work only 5 days per week. No Saturday or Sunday work."

An executive from activated carbon products manufacturing industry also mentioned about family events organized by the firm and added that, "during work, we give proper breaks, ensure safety, organize gatherings with the management so that workers feel more close to the firm. This interaction is vital and makes them feel like home. We also have an anonymous comments box for employees to express their concerns/grievances. Unfortunately, we cannot cater to every demand they ask but we at least make sure they are heard and try our best to get the message across to them either that we are trying or why it cannot be achieved." The Production Manager of a pharmaceutical products firm stated that "total well-being is one of three major strategic priorities for us as an organization. For this, the organization assigns a team, including trained resilient coaches, to come up with a plan on this subject. We developed a program called "Total Well Being" which covers the whole staff including office and factory. This started with initial one day workshop allowing the employees to learn the four dimensions of resilience, change/ agility and recovery principles. Then, the program has events well spread around the year to implement and continue the learning they gain. This includes programs on all four dimensions, change/ agility and recovery such as "After lunch walks, beach walks, movie of the month, voluntary working, meditation/ Friday Zumba, self-esteem (understand the purpose), workers day (quarterly), work rotations inter departmentally, my mentor, counselors etc..." Similarly, the Human Resource Development Director of a firm engaged in ship building and repair services cited eight strategies to promote work-life balance.³⁰

²⁹ These teams included a team leader to take routine administrative decisions and a "best friend" selected from the team to address grievances and welfare issues of team members.

³⁰ a) Facilitating employee Welfare Association activities, b) Employee get-togethers (Separate events annually for i) All employees, ii) Foremen & Supervisory, iii) Clerical and iv) Executive grades), c) Sports – employee participation in all major mercantile sports events, d) CSR activities in groups, e) Planning different religious ceremonies with collective participation, f) Stress relieving sessions; yoga and exercise sessions, g) Related training; outward bound training and h) Counseling and grievance management.

CS evidence revealed compliance audit system as an important channel for technological change and promote good jobs. A firm engaged in pharmaceutical and consumer healthcare products indicated that compliance audit system being practiced through daily meetings and continuous training of the factory staff.³¹ A respondent from activated carbon industry stated that compliance audit is carried out jointly by the senior management and independent auditors. In their view, regular audits help the firm to identify proper job roles and products which can be introduced to the global market. Another respondent from the tire manufacturing industry recognized compliance audit as a part of “Business process assessment” and narrowing the system gaps. Some of the LS firms from apparel manufacturing industry stressed the keen interest shown by European customers on compliance audit system representing both internal and external parties. The internal system includes the Compliance Manager and his team plus functional teams representing Human Resources, Administration, Quality and Production divisions. The external audit is carried out by a third party and they visit the firm with or without prior announcement. A firm engaged in ship building and repair services indicated that ISO 9001: 2008 quality management system is in place and regular surveillance and certification and upgrading audits are conducted to maintain compliance audit requirements.

CS evidence on the links between LS and SME sector firms indicate the business relations between these two sets of firms vary from 5 to 35 years and maintain two types of transactions: a) supply of raw material, parts, components, and finished goods and b) providing support services e.g. transport, security, cleaning, canteen facilities etc. Survey evidence revealed over 90 percent of LS firms depending on SMEs for support services and 50 percent using SMES as a source of raw materials, parts and components, and finished goods.³² The LS firms cited cost control and ability to concentrate fully on core activities of production as main reasons for operating through sub-contractors. CS firms operating in ship building and repair services, pharmaceuticals and coir based products received raw material, components and final products from sub-contractors. The LS firms linked with the SMEs plan to expand their business network through sub-contractors. The evidence from SME samples further confirmed the integrated nature of SMEs with large scale firms.

Both LS and SME firms also cited the negative influence of several policies on creating ‘good jobs.’ Most of the firms repeatedly emphasized policy uncertainty at national level (e.g. inflation, exchange rate, interest rates, tax regimes etc.), lack of skilled workforce, inadequate institutional support and preoccupations with controversial political and constitutional issues rather than needed economic reforms as key factors affecting growth. The negative impact of such policies was further emphasized in the context of GPS-led growth where the SMEs could play a vital role in promoting exports and creating ‘good jobs’ through sub-contracting. Existing body of evidence on policies and regulations affecting business growth indicated multiple tariffs and para tariffs, and CESSSES as key constraints on the growth of trade oriented firms irrespective of scale of operations (Annex 3). More specifically, the system of multiple para-tariffs imposed on imports and exports was identified as a significant cost constraint on export oriented industrial production. In the literature, trade costs due to such interventions have been estimated to be around 15% for low-income countries and 16% for lower-middle income countries (OECD, 2015). In the case of Sri Lanka, the cost of trade barriers should be much higher due to multiple tariffs, para tariffs, and CESSSES on export and import items.

³¹ At these meetings, the production staff shares major findings of the quality/ safety/ regulatory incidents happening in other sites.

³² For similar evidence see OECD (2015).

6. Summary and conclusions

'Good jobs' involve premium earnings and employee well-being. Good jobs also offer spill overs on living standards of workers, aggregate productivity, social cohesion, equity and poverty. Statistical evidence indicate firm heterogeneity (e.g. firm size, sub-contracting, geographic location, efficient scale of production, skills intensity, etc.) and links with global production system (e.g. use of imported raw material, R&D intensity, exporting) as key determinants of 'good jobs' in manufacturing. These findings support 'Skill-Enhancing-Trade hypothesis' rather than Hechsher-Ohlin and Stolper-Samuelson hypothesis. The CS evidence points to application of training and development, recognition, incentive payments, team building and work-life balance as effective strategies of creating 'good jobs.' The presence of multidimensional layers of worker motivation schemes and inculcating positive values in the minds of workers have led to positive work cultures, improved employee well-being and creation of good jobs in manufacturing.

The dominance of LS firms in creating 'good jobs' point to some important welfare implications as they account for more than 70 percent of employment in manufacturing. The case study evidence also confirmed that LS firms make substantial investments on employee well-being as against the SME counterparts. The average wages for skilled workers in manufacturing is 3.4 times higher than national poverty line and hence LS firms seem to be promoting 'good jobs' and contributing towards poverty reduction at national level. It was also noted that large scale firms operate through a network of subcontractors as a strategy to minimize costs and to enhance efficiency. As a result, the SMEs receive indirect benefits from GPS led growth through sub-contracting.

Sri Lanka has not been able to gain full benefits of its comparative advantages due to institutional and policy failures. The latter especially has been a serious constraint on growth and development of business enterprises. The post-2005 policy regime characterized by import substitution, multiple tariffs, taxes and regulatory procedures could be considered as major constraints on business growth and creation of 'good jobs.' The change of policy regime in 2015 has led to more uncertainty and lack of direction in economic policies. Sri Lanka needs to make a conscious effort to better connect to the world economy in order to benefit from new ideas, technology, and GPS led exports. The global markets provide far bigger demand for goods and services than the domestic market. The extent to which domestic industries integrate with global production system depend on several factors such as investment policy, trade policy, quality of human resources, infrastructure support, and quality of institutions.

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Annex 1 Profile of Case Study firms from Large Scale sector

Industry	Years of Experience	Employment	Factor intensity	Exports %	Female %	Casual worker %
Textiles	6	200	Capital	100	5	1
Ship building and repair	41	2120	Skill	97	2	19
Pharmaceutical & Consumer healthcare	50	310	Labour	2	24	21
Activated Carbon	35	950	Capital	95	10	5
Plastic Bottles and Caps	38	118	Capital	0	20	30
Confectionary	47	1988	Capital	7	46	38
Tires	10	570	Labour	2	0.1	7
Apparel	30	650	Skill	100	85	0
Pumps manufacturing	110	450	Skill	0	2	30
Coir based products	12	925	Capital	99	67	64

Annex 2 Profile of Case Study firms from SME sector

Industry	Years of Experience	Employment	Factor intensity	Exports %	Female %	Casual worker %
Textiles	6	200	Capital	100	5	1
Ship building and repair	41	2120	Skill	97	2	19
Pharmaceutical & Consumer healthcare	50	310	Labour	2	24	21
Activated Carbon	35	950	Capital	95	10	5
Plastic Bottles and Caps	38	118	Capital	0	20	30
Confectionary	47	1988	Capital	7	46	38
Tires	10	570	Labour	2	0.1	7
Apparel	30	650	Skill	100	85	0
Pumps manufacturing	110	450	Skill	0	2	30
Coir based products	12	925	Capital	99	67	64

Annex 4 Unweighted Average Protection rates¹ – 2002, 2004, 2009 and 2014

Period	Customs duties	Para-tariffs	Total protection rate
November 2002			
Agriculture (HS 01-24)	21.1	5.2	26.3
Industry (HS 25-87) ²	7.6	2.5	10.1
All tariff lines	9.6	2.9	12.5
January 2004			
Agriculture (HS 01-24)	24.6	3.5	28.1
Industry (HS 25-87) ²	8.8	1.9	10.7
All tariff lines	11.3	2.1	13.4
December 2009			
Agriculture (HS 01-24)	24.6	25.0	49.6
Industry (HS 25-87) ²	10.3	13.7	24.0
All tariff lines	12.4	15.5	27.9
January 2011			
Agriculture (HS 01-24)	25.4	21.4	46.8
Industry (HS 25-87) ²	9.1	10.6	19.7
All tariff lines	11.5	12.2	23.7
January 2012			
Agriculture (HS 01-24)	25.4	21.4	46.8
Industry (HS 25-87)	9.1	10.6	19.7
All tariff lines	11.5	12.2	23.7
January 2014			
Agriculture (HS 01-24)	25.4	21.8	47.2
Industry (HS 25-87)	9.1	10.6	18.0
All tariff lines	11.8	12.2	24.0

Notes:

1. All protection rates are percentages of cif import value.
2. This predominantly reflects manufacturing protection. Mining (less than 3%) accounts for a tiny share of industrial output.

Source: Athukorala (2013), Pursell & Ahsan (2011) and estimates by the author for 2012 and 2014 using Sri Lanka Tariff Guide published by the Sri Lanka Customs in 2012 and 2014.