

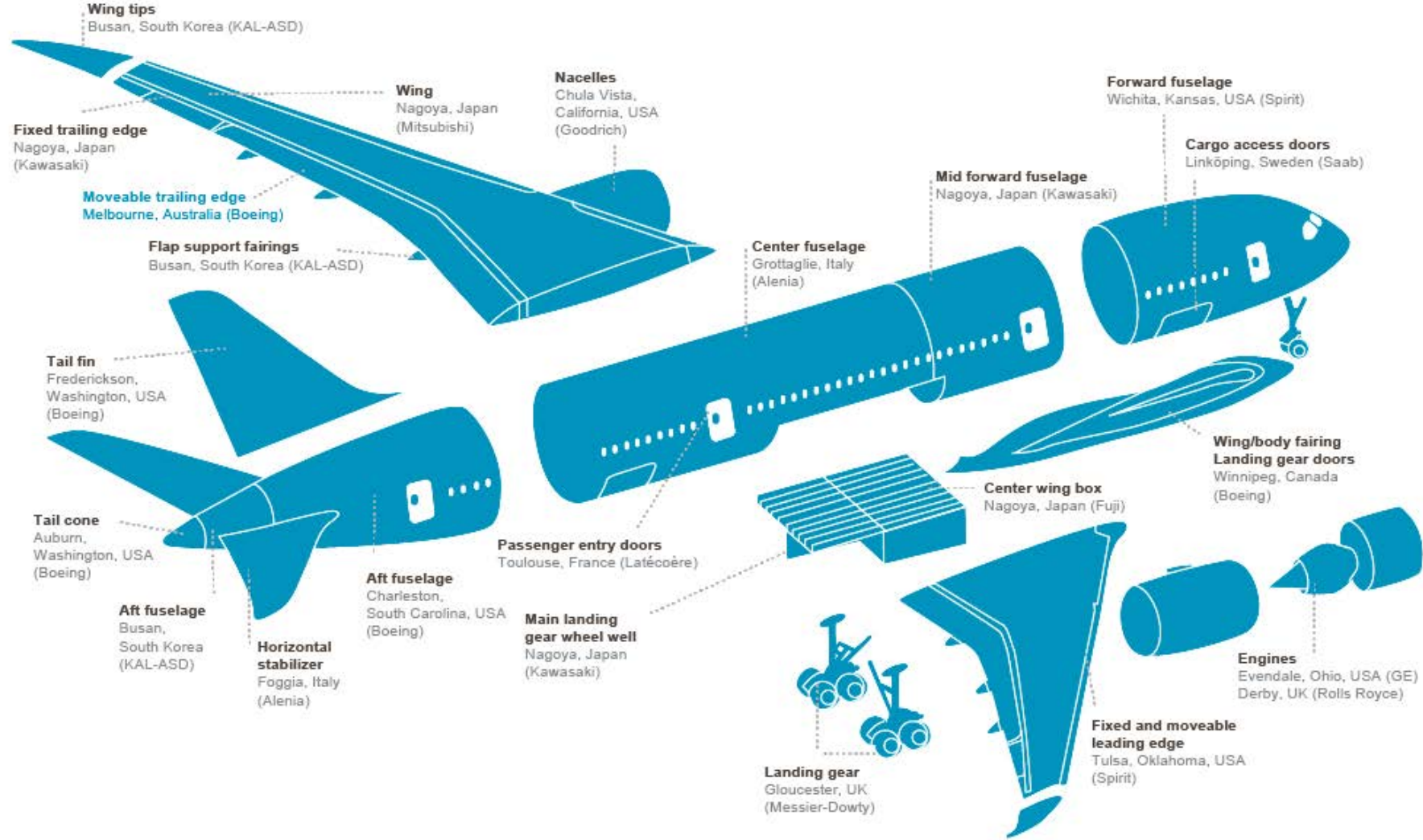
Global production sharing, value added in exports, and employment generation: Evidence from Thailand

Wannaphong Durongkaveroj

Arndt-Corden Department of Economics, Crawford School of Public Policy,
The Australian National University, Canberra, Australia

INTRODUCTION

Cross-border dispersion of production process within vertically integrated global industries, known as ‘**global production sharing**’, has been an increasingly important feature of economic globalisation.



Policy makers in developing countries focusing on ‘**domestic value added (domestic content) ratio**’ of export in industrial policy. This emphasis harks back to the era of import substitution industrialisation and is not consistent with reaping gains from global production sharing.

OBJECTIVE

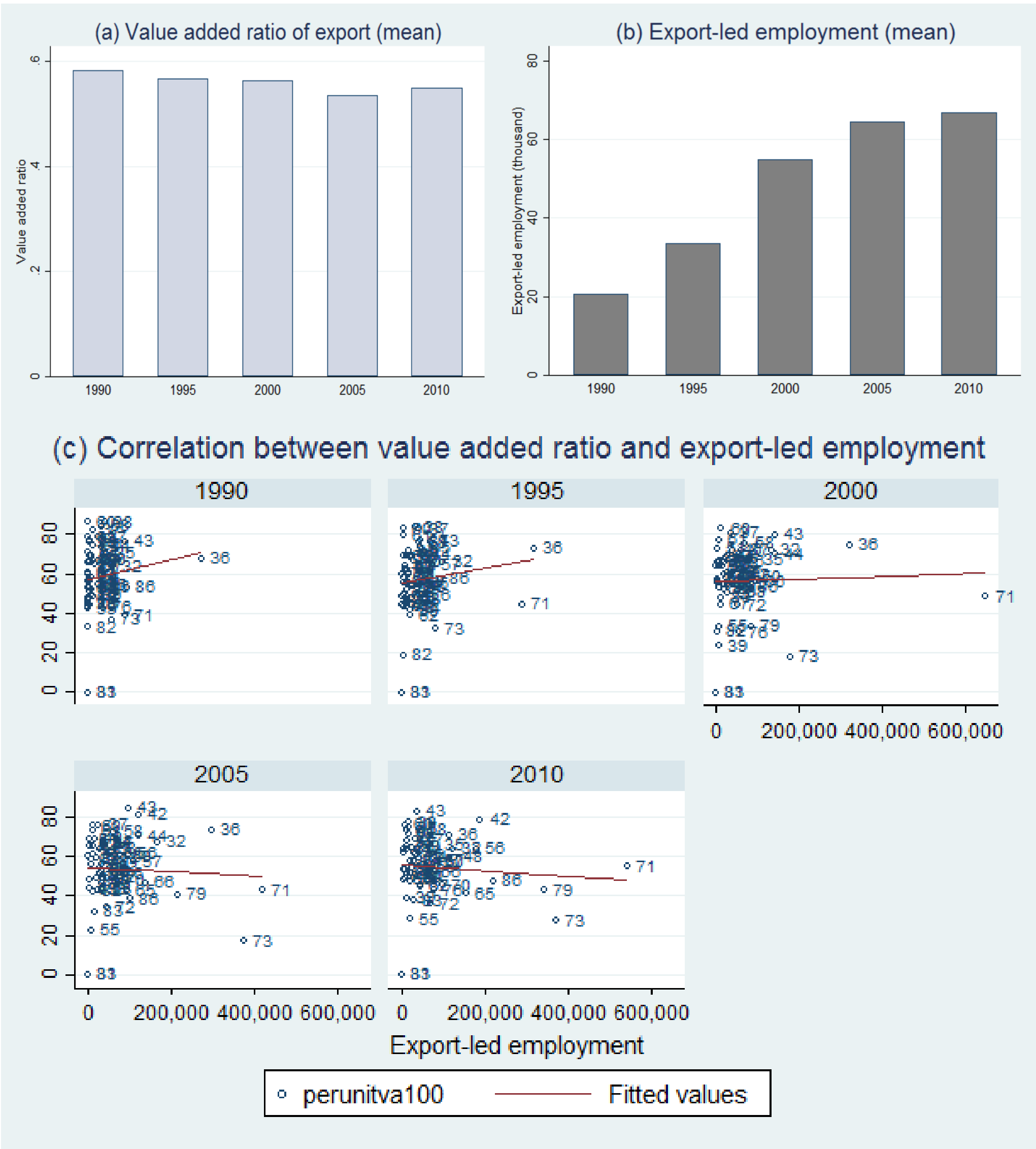
- To revisit the justification of using domestic value added ratio as a policy guidance to promote economic growth in the era of economic globalisation through a case study of Thailand.
- The hypothesis is that industries with low per-unit value added can stimulate export growth and employment generation.

METHODS

- Apply the input-output technique to calculate domestic value added ratio, three export performances (net-export earnings, export-led income, and export-led employment), ratio of wage in value added (proxy for poverty), and ratio of wage to profit (proxy for inequality) using Thailand’s I-O tables for 1990, 1995, 2000, 2005 and 2010
- Test correlation among these variables using Pearson and Spearman correlation analysis
- Measure, at the I-O industry level, engagement of Thai manufacturing in ‘global production network’ using divagated trade data
- Undertake a regression analysis using a panel dataset constructed by putting together the data for the five years

RESULTS

(a) Correlation Analysis



(b) Regression

DEP VAR: Export-led Employment	(1)	(2)	(3)	(4)
Value added ratio	0.754 (1.051)	0.903 (1.030)	0.804 (1.092)	0.908 (1.070)
Productivity	0.181* (0.0912)	0.173* (0.0902)	0.173* (0.0909)	0.185** (0.0906)
GPN		0.146*** (0.0505)	0.105 (0.0939)	0.340*** (0.0864)
GPN x Per-unit VA			0.0867 (0.117)	0.128 (0.143)
GPN x Productivity				-0.0263* (0.0136)
1995	1.045*** (0.134)	1.040*** (0.132)	1.042*** (0.132)	1.057*** (0.132)
2000	1.579*** (0.152)	1.555*** (0.148)	1.566*** (0.149)	1.575*** (0.148)
2005	1.893*** (0.197)	1.885*** (0.187)	1.893*** (0.189)	1.906*** (0.186)
2010	1.784*** (0.227)	1.784*** (0.214)	1.787*** (0.216)	1.808*** (0.215)
Observations	275	275	275	275
Adj. R-sq	0.519	0.546	0.545	0.549
Industry dummies	Yes	Yes	Yes	Yes

Notes: Heteroscedasticity-corrected (robust) standard errors are in parenthesis, *** and * indicate significance at 1% and 10% level, respectively.

CONCLUSION

- The results cast doubt on the validity of the contemporary approach to policy guidance based on domestic content of export.
- No statistically significant relationship between value added ratio and export-led income and export-led employment. An increase in value added ratio is negatively associated with an increase in poverty and inequality.
- This implies that an emphasis on industries with high domestic content of export will run counter the core of economic development.
- Engagement in global production network has played a key role in export performances. Despite low per unit value added, industries involved in global production sharing significantly contribute to employment generations, which is the key to poverty reduction. Decline in per unit value added is a structural feature of the on-going process of GPS.

High value-added,
low employment

- Cement, Concrete and non-metallic products
- Aircraft
- Drug
- Shipbuilding

Low value-added,
high employment

- Radio, television, & communication equipment
- Metal furniture and fixtures
- Motor vehicles
- Industrial machinery