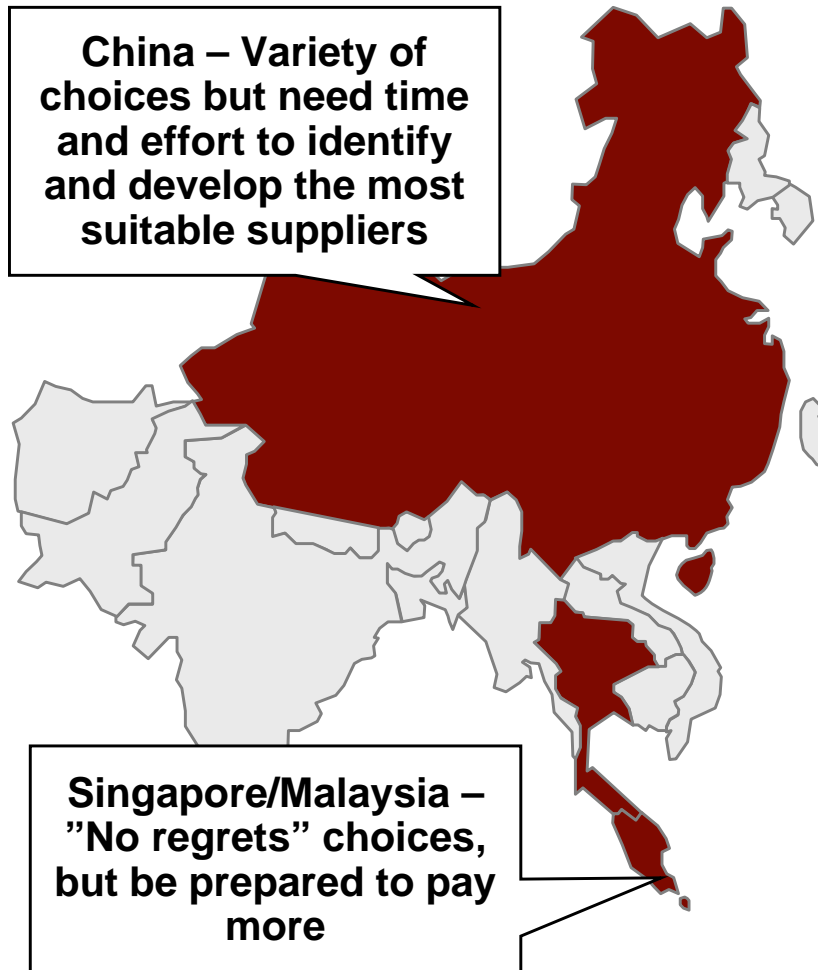


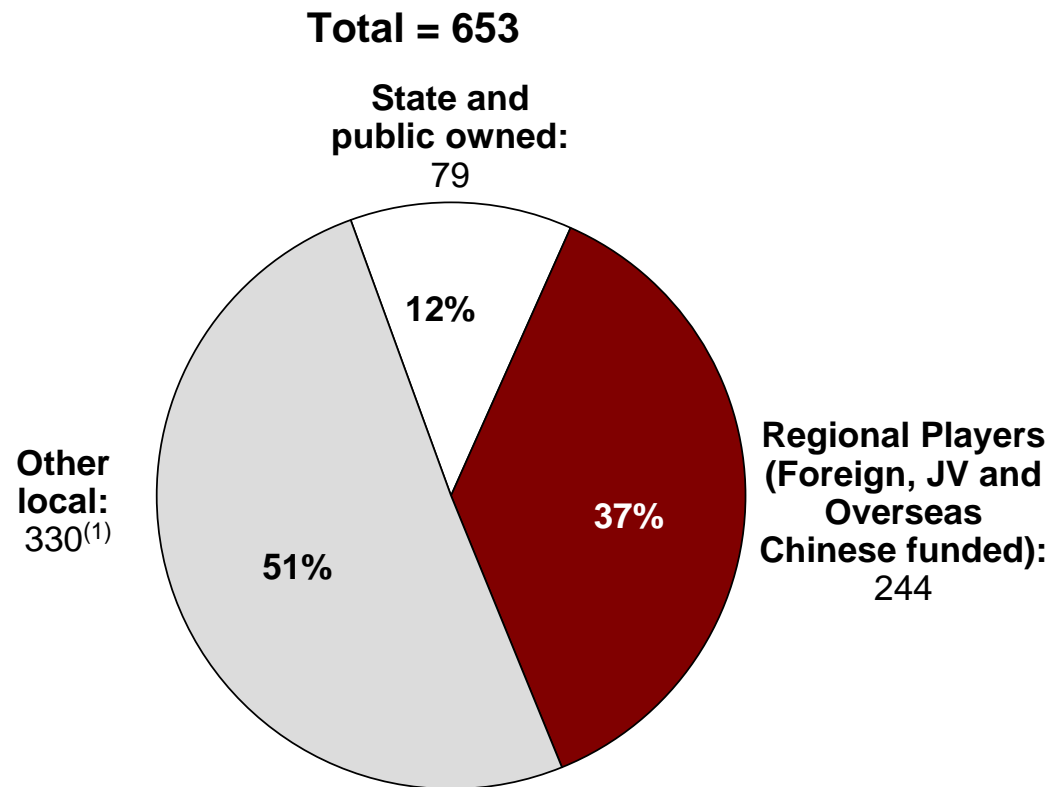
In Asia, Singapore, Malaysia, and China are the major choices for buying injection molding plastic parts



Country	Supply Base Characteristics
China (Mainland + HK)	<ul style="list-style-type: none"> • 650+ sizable injection molders, a variety of suppliers serving all industries for domestic use as well as exports • Capability in high-level precision parts and tooling are still limited, most by companies with overseas origin
Singapore	<ul style="list-style-type: none"> • 30+ injection molders, mostly for electronics and electric industries • More advanced in precision engineering and processing; and most big players have started manufacturing in China
Malaysia	<ul style="list-style-type: none"> • 290 + injection molders, primarily serve electronics, electric, automotive and household industries • Over-supply and competition is keen, some have moved manufacturing to China

A noticeable trend in Asia is the rise of players with regional footprint that includes a major presence in China

Mainland China Injection Molders by Ownership



Regional players are ideal for sourcing high-quality high-precision parts

Characteristics of Regional Players with China Presence

- Typically 2-3 times bigger than domestic companies
- Most mainland subsidiaries are owned by HK, Singapore and Malaysia companies
- Concentrated in Shenzhen/Dongguan and the Greater Shanghai Area
- Advanced in engineering and processing technology
- Tends to have overseas Chinese management team up to international standard
- Very selective customers, will only accept high-value adding projects

Notes: (1) Include private owned companies, domestic JVs, and joint stock companies
Source: China markets yearbook 2005, A.T. Kearney analysis

Generally speaking, there are 2 clear segments of suppliers capable of supporting MNC buyers in China

Foreign Origin

1st Tier Local Player

Production Capability

- Larger scale (e.g., V.S. and Flextronics plastics in China are 4 times larger than 1st tier local players), focusing on electronics industry
- More advanced production equipments and technologies for manufacturing of more complex and precise products

- Smaller scale, usually belongs to a large group (like Haier and Cheeyuen)
- Production range is smaller than FIEs in China, with strong industry focus (e.g., Haier plastics is focusing on auto and white goods)
- Overall production cost is lower than that of FIEs

Logistics and Inventory

- Strong inventory capabilities (e.g., V.S. provides inventory and consignment services for its major customers in China)
- Strong logistics capabilities (V.S. owns over 200 trucks for shipping to harbor)

- Limited inventory and logistics capabilities (most Chinese suppliers have the raw materials and finished goods stocked in the same inventory room, which is not big and very crowded)
- This is even worse for those belongs to a big manufacturing group (e.g., Haier plastics doesn't have its own inventory and logistics department, but have to depend on the Haier Group on that)

Customer Relationship

- Extensive experience cooperating with MNCs
- Native English-speakers makes communications easier

- Some 1st tier suppliers have just begun to work on export business
- Some still depend on trading companies
- Most of them have no native English speakers in sales or engineering teams

Foreign Origin — Company Name Confidential

Illustrative

Contact Information	Staff Profile	Key Customers Information	Key Export Markets/Products
Confidential Title: Confidential Tel: Confidential Fax: Confidential E-mail: Confidential	<ul style="list-style-type: none"> • Direct Staff: ~ 6000 • Support Staff: ~ 500 • Sales/Marketing Staff: ~ 200 • Engineering/ Design Staff: 300 	<ul style="list-style-type: none"> • Canon • Sony • Next Pack • DIXIE 	<ul style="list-style-type: none"> • USA • Japan
		<ul style="list-style-type: none"> • Key customers are in consumer electronics industry 	<ul style="list-style-type: none"> • Plastics parts for electronics and telecommunications (as well as assemblies)
Revenues and Profits (EU)		Cost Structure (%)	
2005 > US\$ 150 million		N/A	
Manufacturing Capability	Quality Capability	Logistics Capability	Testing Capability
<ul style="list-style-type: none"> • Floor Space: 4 X 22,000 sqm • Capacity utilisation: 60% • Mould design and making capability (Strong) • Final product assembly capability • PCBA capability 	<ul style="list-style-type: none"> • ISO 9001: 2000 (first certified in 2001 by BSI) • ISO 14001: 1996 (first certified in 2005 by SGS) 	<ul style="list-style-type: none"> • In-house warehousing • Special warehouse and package treatment for export products • They have their own logistics department and custom department for international shipment 	<ul style="list-style-type: none"> • CMM • Profile projector • Raw material components test • Strong final product test capability (golden supplier for Canon and Sony)

1st Tier Local Player — (Company Name Confidential) Company Profile

Illustrative

Contact Information	Staff Profile	Key Customers Information	Key Export Markets/Products
Confidential Title: Confidential Tel: Confidential Fax: Confidential E-mail: Confidential	<ul style="list-style-type: none"> • Direct Staff: ~ over 2000 • Support Staff: ~over 100 • Sales/Marketing Staff: ~ over 50 • Engineering/ Design Staff: over 50 	<ul style="list-style-type: none"> • Haier Group • HYFLUX LTD. (Singapore) • BMW, GE, etc. 	<ul style="list-style-type: none"> • USA • Other countries in Asia
Revenues and Profits (EU)		Cost Structure (%)	
2005 > US\$ 200 million (Group)		N/A	
Manufacturing Capability	Quality Capability	Logistics Capability	Testing Capability
<ul style="list-style-type: none"> • Floor Space: 2,000,000 sq m • Thermoplastics • Capacity utilisation: 70 ~ 80% • Mould design and making capability (very strong) • New precise injection plant will be in use in March, 2006 	<ul style="list-style-type: none"> • ISO 9001: 2000 (first certified in 2001 by CNAB) • ISO 14001 (first certified in 2004 by CNBA, IAF) 	<ul style="list-style-type: none"> • In-house warehousing (small) • Rented warehouse (for export) • New in-house warehouse under construction 	<ul style="list-style-type: none"> • CMM (2 CMM machines) • 3D scanner • Raw material components test • Final product test (very strong, based on Group test an research center)

However, not all injection molded parts are suitable for sourcing in Asia

When is saving NOT to be expected from Asian LCC?

Nature of Product / Technology

- Too commoditized products, limited value-adding in manufacturing process, e.g. PVC tubes
- Advanced processing technology, especially with engineering plastics, e.g. PBT/PC with GF

Alternatives

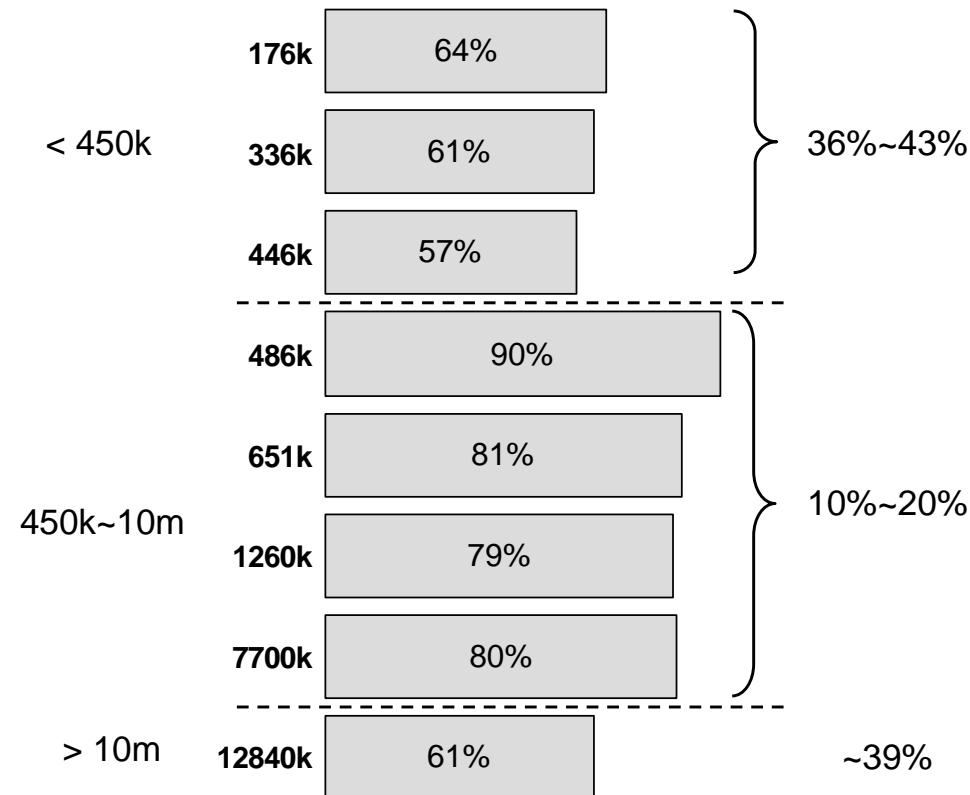
- Change global sourcing to regional sourcing, e.g. Poland for EU, or Mexico to NA
- Leverage quotations from LCC suppliers to gain a better negotiation position with incumbent HCC suppliers

Supply Chain Implications

- Complicated supply chain requiring additional cost for reconfiguration, e.g. too many delivery points in destination country
- High duty and transportation cost, prolonged lead time

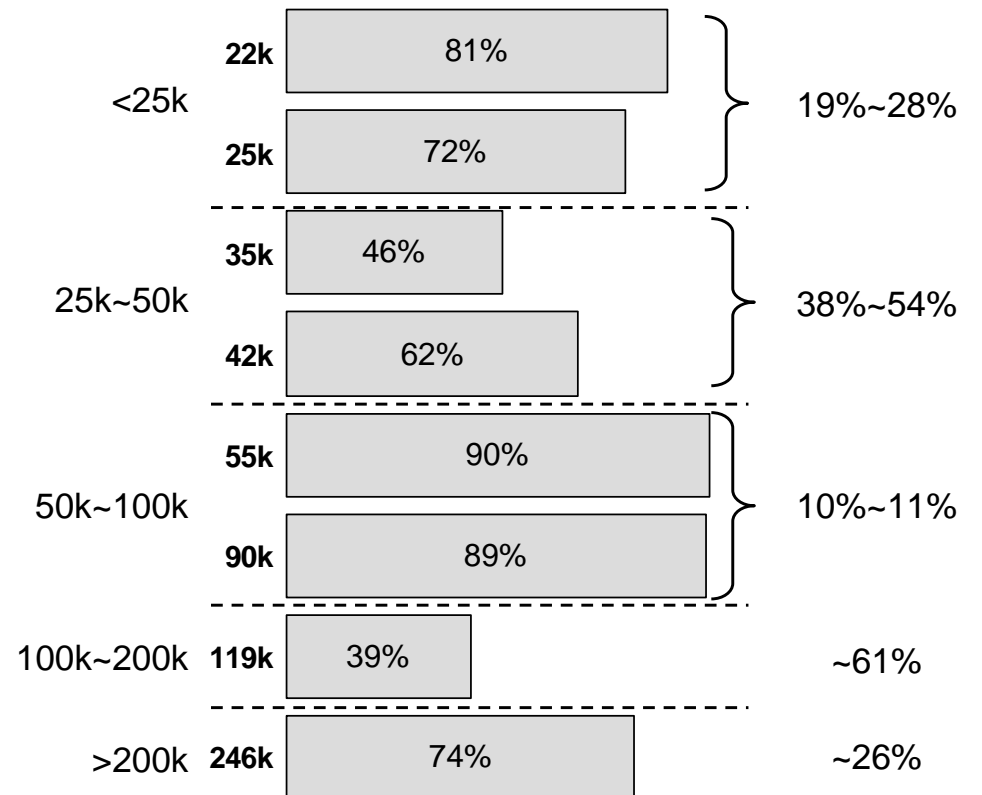
Example – Saving ranges from injection molded parts in China based on EXW price

Made-in-china Plastic Part Costs⁽¹⁾ Against US Baseline
(Volume P.A.)



Savings Range

Made-in-china Plastic Part Costs⁽¹⁾ Against EU Baseline
(Volume P.A.)



Savings Range

Notes: (1) Costs here represents EXW prices quoted by leading suppliers, not including freight and duties