

# **The Economics of MIDP**

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# MIDP: The Context

- Importance of the motor industry & its performance
  - exports, investment, rationalization, competitiveness
  - size of the program (well over R100 billion in subsidies from 1996 to 2008)
- Industrial policy strategy reviews; a possible model for other sectors (textiles?)
- Misconceptions and disagreements about how MIDP works and its economic impacts

# Outline

- Economic analysis of MIDP
  - How it works
  - Value of incentives/subsidies provided
  - Impacts and economic costs
- Processes for designing, managing and assessing MIDP
  - Capacity, independence, transparency and accountability
- General questions and implications

# Background: Pre-MIDP

- Long history of industry protection
  - High tariffs led to a high cost domestic assembly industry; aggravated by local content rules
- Industry could not survive under deregulation and trade liberalization that started in the 1990s

# MIDP

- Launched in 1995 to help the motor industry become competitive in the new policy environment
- Initially set for 5 years; extended twice til 2012; recently extended to 2020 (25 years); now talk of additional bailouts
- Incentives were designed to rationalize production through specialization for export

# What is MIDP?

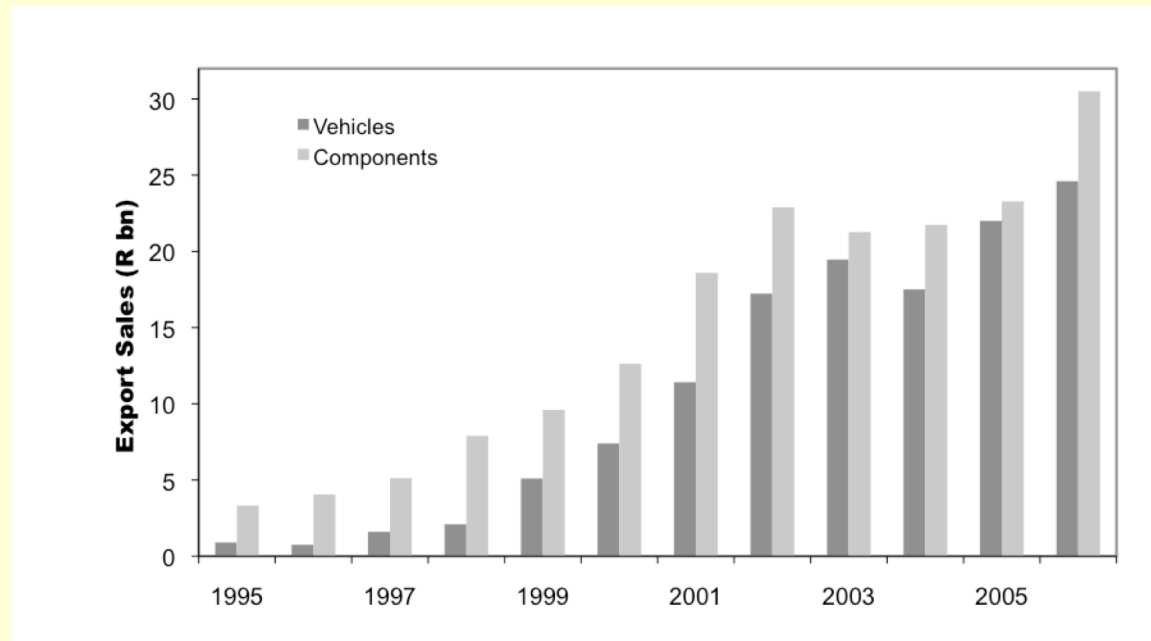
- High but declining tariffs on vehicles and components; virtual ban on used car imports
- No local content requirements
- Duty relief on imported inputs
- Duty credits for exports and for investment (and soon for production)

(Note: Many other incentives; but this is the “core” of MIDP)

# Industry Performance

- The industry has performed remarkably well since the start of MIDP
  - Vehicles: investment, exports and imports
  - Components: investment and exports (main products are leather seat covers and catalytic converters)

# Export Sales





## Motor Industry or...?

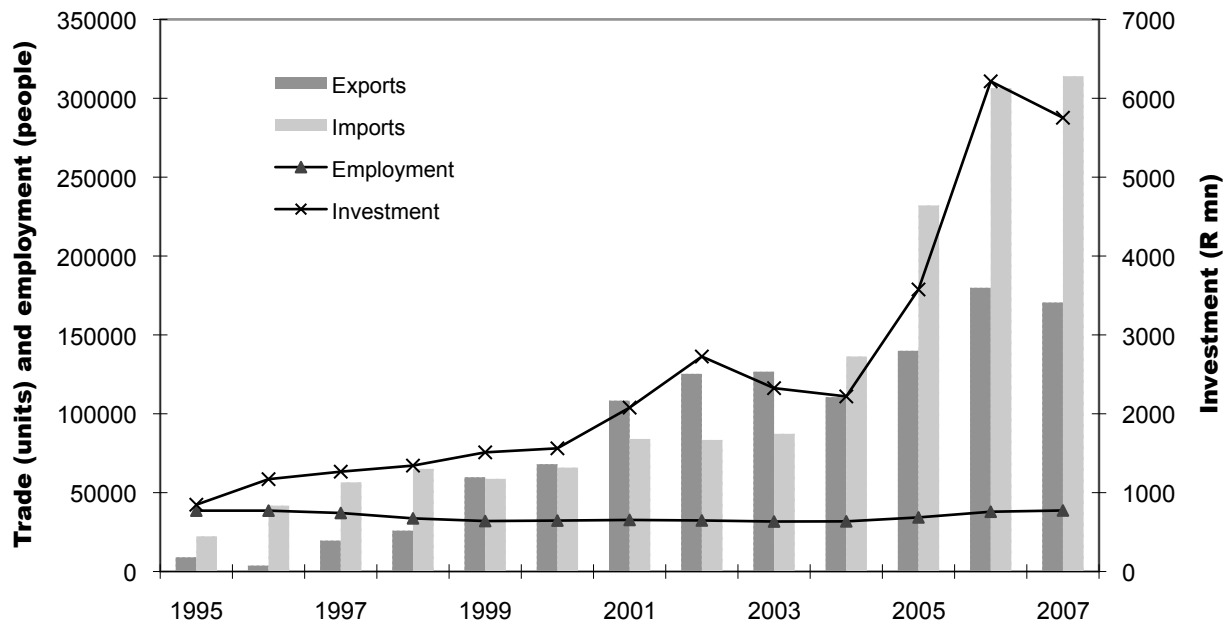
- IRCC earnings in 2007:

Vehicles: R 8 billion

Components: R 16 billion

o.w. catalytic converters: R 8 billion

# Vehicle Assembly



# Employment

**Employment in the Motor Industry (thousands of workers)**

	95	96	97	98	99	00	01	02	03	04	05	06	07	08
<b>Assembly</b>	38.6	38.6	37.1	33.7	32.0	32.3	32.4	32.4	31.7	31.8	34.3	37.9	38.2	36.1
<b>Components</b>	47.0	45.0	44.0	40.0	39.0	38.5	39.0							
					67.2	69.5	72.1	74.1	75.0	74.5	78.0	78.0	78.5	76.0
<b>Tires</b>	11.0	10.0	9.5	9.1	9.0	8.6	8.7							
					6.7	6.6	6.3	6.0	7.2	7.2	6.8	6.5	6.7	6.9
<b>Motor Trade</b>	178.0	180.0	180.0	170.0	175.0	180.0	182.0	185.0	191.0	194.0	198.0	198.0	200.0	n.a.
<b>Total</b>	274.6	273.6	270.6	252.8	280.8	288.4	292.8	297.5	304.9	307.5	317.1	320.4	323.4	

*Source:* NAAMSA and NAACAM. Employment in assembly in 2007 and 2008 is measured as of July.

*Note:* The breaks in the series for components and tyres are the result of statistical reclassifications by NAACAM, the association of components producers.

# **Size and Costs of MIDP Incentives**

# Key MIDP Incentives

- **IRCC:** import duty credits related to value-added in exports of vehicles and components; their value arises from importing duty-free and selling at duty-inclusive domestic price (benefit goes to exporters, not consumers)
- **PAA:** duty credit equal to 20% of qualifying investment, over 5 years
- **Duty Free Allowance:** reduces burden of duty on components; for domestic market; 27% of sales
- **Duty Drawback:** rebate of import duties on imported inputs for exports

# Effects on Firms

- The economic effects of MIDP depend on the incentives they create for producers and investors
- Two kinds of estimates are reported here
  - Effective rates of protection provided to exports and to domestic sales of components and vehicles
  - Rates of subsidy to typical investments in the industry

# **Effective Rates of Protection**

## Effective Protection: Motor Vehicles (%)

		<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2012</b>
<b>Export Sales</b>		65	47	29	18
<b>Domestic Sales</b>					
<b>Import</b>	<b>30%</b>	106	74	52	37
<b>Share</b>	<b>50%</b>	125	87	61	44
	<b>70%</b>	175	121	83	59



# Effective Protection: OEM Components Exports (%)

	1995	2000	2005	2012
<b>IRCCs used for CBUs:</b>				
<b>Converters</b>	62	26	8	6
<b>Other Components</b>	62	33	18	11
<b>IRCCs used for Parts:</b>				
<b>Converters</b>	49	28	11	8
<b>Other Components</b>	49	35	23	14

# Summary

- High but declining protection given to all activities
- Highest protection given to production for the domestic market (still as high as 83%, versus 29% for vehicle exports)

# **Net Subsidies to Investment**

# Net Subsidies to Investment

- Estimated as the increase in the net present value (NPV) of cash flows from typical investments as a result of MIDP incentives
- Increases in NPV are expressed as a percentage of the amount invested
- The investments are representative, but all parameters and assumptions can be varied in accordance with updated financial data

# Results

- The investment subsidies are large; IRCCs are the main contributors to investment returns
- Although subsidy rates have been falling, they remain large

# MIDP Subsidies: Typical Investments

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Investment	Subsidy (% of amt. invested)
Auto Assembly, 1996	494%
Auto Assembly, 2005	275%
Components, 1996	681%
Components, 2005	264%

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# **Some Economic Implications**

# Consumer Prices

- Domestic prices are higher than they would be in the absence of MIDP
- At the budget end of the market, the policies reduced the quality of cars available to domestic consumers (Tazz, CitiGolf)



# Rents and Economic Waste

- Subsidies to exports and production for the local market are either
  - necessary to cover excess costs of producing in South Africa (i.e. economic waste) or
  - unnecessary (because domestic production is competitive) and therefore create large rents for producers and investors
- Rents transferred to foreign shareholders are also economic waste for South Africa

# Economic Waste in Non-Competitive Projects Due to MIDP

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Investment	Economic Waste per Billion Rand Invested (R billions)
Auto Assembly, 1996	4.9
Auto Assembly, 2005	2.8
Components, 1996	6.8
Components, 2005	2.6

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# Employment

- Weak job growth in vehicle and components manufacturing
  - Jobs fell by 17% in the first 5 years of MIDP
  - In 2000-2004 employment in vehicle production hardly grew despite investment of over R12 billion; jobs in components grew by 1% per year
- Twice as many jobs in labor intensive sales and service; these have grown in step with vehicle sales; higher vehicle sales could provide many downstream jobs

# Aggregate Costs

- Current subsidies to producers R11-12 billion per year; cost to consumers R19-20 billion per year
- From 1995-2007 subsidies to producers R100-120 billion; cost to consumers almost R200 billion
- Subsidy/job R300-400 thousand/year
- Subsidy to investment 225-700 percent

# Other Economic Issues

- External technology benefits
- Administrative and compliance costs
- WTO
- Competitiveness and sustainability without subsidies

**APDP**

# MIDP vs APDP

## MIDP & APDP Main Parameters (%)

	<b>2010</b>	<b>2012</b>	<b>2013</b>	<b>2015</b>	<b>2020</b>
<b>CBU tariff rate</b>	0.27	0.25	0.25	0.25	0.25
<b>CKD tariff rate</b>	0.22	0.2	0.2	0.2	0.2
<b>Production</b>					
<b>subsidy rate**</b>	0.7	0.7	0.55	0.53	0.5
<b>DFA rate***</b>	0.27	0.27	0.2	0.18	0.18
<b>PAA rate</b>	0.2	0.2	0.2	0.2	0.2

\*\* Under the "old" or current scheme the production subsidy applies only to exports. The rate used here assumes the IRCCs earned on exports are used to import CKDs.

\*\*\* Under the "old" or current scheme the DFA applies only to domestic sales.

# MIDP vs APDP

## MIDP & APDP Subsidy Rates

### Rate of Subsidy (%) to Production of Autos for Export

<b>Subsidy from:</b>	<b>2010</b>	<b>2012</b>	<b>2013</b>	<b>2015</b>	<b>2020</b>
<b>Tariff</b>	0.0	0.0	0.0	0.0	0.0
<b>Prod'n Subsidy</b>	15.4	14.0	11.0	10.6	10.0
<b>DFA</b>	0.0	0.0	13.3	12.0	12.0
<b>PAA</b>	3.3	3.3	3.3	3.3	3.3
<b>Total</b>	18.7	17.3	27.7	25.9	25.3

### Rate of Subsidy (%) to Production of Autos for Local Sales

<b>Subsidy from:</b>	<b>2010</b>	<b>2012</b>	<b>2013</b>	<b>2015</b>	<b>2020</b>
<b>Tariff</b>	38.7	36.7	36.7	36.7	36.7
<b>Prod'n Subsidy</b>	0.0	0.0	15.0	14.5	13.7
<b>DFA</b>	25.1	22.5	16.7	12.5	12.5
<b>PAA</b>	3.3	3.3	3.3	3.3	3.3
<b>Total</b>	67.1	62.5	71.7	67.0	66.2



# **Policy Processes**

# The MIDP Review: TORs

- TORs very broad and interpretation flexible; two sets of consultants
- The industry view (and the dti's) was that the job was to extend MIDP and maintain current support levels in a WTO-consistent manner
- This assumes there is no need to review, from a national perspective, the overall economic costs and benefits of the program or of possible alternatives

# Independence

- Large role of the motor industry
- This and previous reviews have been conducted by persons with close ties to the program and/or the industry
- The dti's capacity in the sector appears to be weak and diminishing
- The apparent lack of independence highlights the fine line between cooperation and capture

# Transparency

- Rules and regulations of the program are not easily available from government sources
- Data on program costs are not published anywhere
- Lack of transparency might help explain why the economic impacts are poorly understood and appreciated

# **The Way Forward**

# MIDP

- MIDP was meant to assist an inefficient industry become competitive and it has done so generously; the costs are high
- Adjustment assistance does not normally last forever; an independent assessment of MIDP's economic impacts is overdue
- Examine options for finalizing the motor industry's adjustment to a normal economic environment; consider the Australian model on which MIDP is based

# General Questions

- What are the minimum requirements for economic analysis of benefits and costs of trade and industrial policies?
- Are industry subsidies such as MIDP the most effective way to create jobs and facilitate labor market adjustment?
- Do the capacity and process issues identified here provide lessons for the use of targeted industrial policies in South Africa?

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