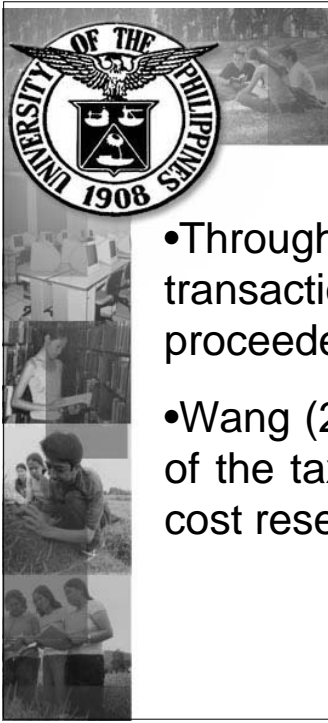




# MEASURING THE TRANSACTION SECTOR IN THE PHILIPPINE ECONOMY



## INTRODUCTION

- Through time empirical research in transaction cost economics have proceeded to different directions.
- Wang (2003) provides a good summary of the taxonomy of empirical transaction cost research.



- Financial Economics
- Williamsonian transaction cost economics
- Transaction sector measurement
- Environmental and Ecological Economics
- Institutions and economic growth
- Economics of Identity





## Wallis and North (1986)



- Constructed estimates of the 'transaction' sector of the US economy from 1870 to 1970.
- The share of GNP absorbed by transaction activities -- basically, the coordination and control of production and marketing -- begins in 1870 at about 24%
- Rises quite steadily to reach 55% by 1950, and remains at about that level for the next decade.



- Includes the rather large proportion of US GNP then diverted to Defense expenditures (9%) (Hazledine, 2001).
- Australia (Dollery and Leong, 1998)
- New Zealand (see Hazledine, 2001; Engelbercht, 2004)
- Other European countries.
- These follow-up studies on industrialized countries consider different time spans.



- There are similar outcomes: the transaction sector rises in time ranging between 45 % and over 60% of GDP in industrialized countries
- Implying that roughly half of the GDP in industrialized countries is required to make markets and hierarchies work (Chobanov, Egbert, and Giuredzheklieva, 2007).



## Measuring the Transaction Sector (Wallis and North)

- Attempted to develop a transaction cost concept which encompasses heterogeneous definitions.
- Developed the notion of the transaction sector.
- The transaction sector is an auxiliary construct for measuring part of the transaction costs in an economy.



- Transaction costs are defined as the costs related to the realization of exchange in an economy.
- Transaction sector
- Transformation sector



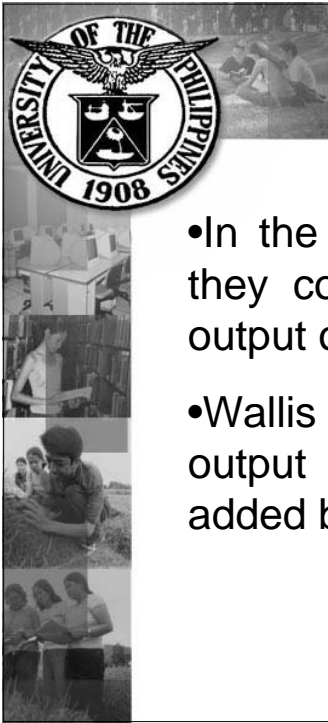
## Transaction Services

- Transaction services are activities that result from using markets.
- Costs related to initiating and performing exchange of services and goods on market.
- Those that are necessary to protect private property rights




## Transaction Sector Categories

- Transaction industries in the private sector
- Transaction costs within firms in the non-transaction industries
- Transaction services in the public sector
- Transaction costs in the non-transaction services



•In the national accounts, in principle, they could be measured as value of output or value of input.

•Wallis and North worked with an output measure, estimating the value added by transaction sector activities.



•Transaction sector output represents expenditure on enabling and facilitating the exchange process, thereby helping to capture the gains from increased specialization, and providing a system of property rights within which the productive activity takes place.



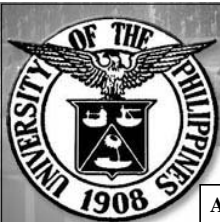
## Transaction Sector Of the Philippine Economy



- Only measures the transaction cost in the private transaction industries and the transaction services in the public sector.
- Transaction activities occurring in non-transaction industries both in the private and public sectors are not measured.



- The value of output in the wholesale trade, retail trade, finance, insurance, real estate and public administration and defense are measured.
- Adds the communication and transport sector as a transaction sector.




## Sectoral Classifications




<b>Agriculture Industry</b>	
Agriculture	Transformation
Fishery	Transformation
Forestry	Transformation
<b>Mining and Quarrying</b>	
Copper mining	Transformation
Gold mining	Transformation
Chromium mining	Transformation
Nickel mining	Transformation
Other metal mining	Transformation
Crude oil	Transformation
Stone quarrying & sand pits	Transformation
Other non-metallic	Transformation




<b>Manufacturing</b>	
Food manufactures	Transformation
Beverage industries	Transformation
Tobacco manufactures	Transformation
Textile manufactures	Transformation
Footwear & wearing apparel	Transformation
Wood & cork products	Transformation
Furniture & fixtures	Transformation
Paper & paper products	Transformation
Publishing & printing	Transformation
Leather & leather products	Transformation
Rubber products	Transformation




Chemical & chemical products	Transformation
Products of petroleum & coal	Transformation
Non-metallic mineral products	Transformation
Basic metal industries	Transformation
Metal industries	Transformation
Machinery except electrical	Transformation
Electrical machinery	Transformation
Transport equipment	Transformation
Miscellaneous manufactures	Transformation
<b>Construction</b>	
Public	Transformation
Private	Transformation





<b>Electricity Water and Gas</b>	Transformation
Electricity & Gas	Transformation
Water	Transformation
<b>Transport, Communication and Storage</b>	
Transport	Transaction
Communication	Transaction
Storage	
<b>Trade</b>	
Wholesale	Transaction
Retail	Transaction


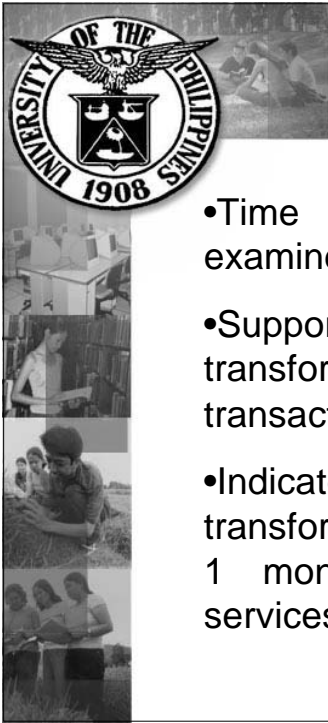


<b>Finance</b>	
Banks	Transaction
Non-banks	Transaction
Insurance	Transaction
<b>Ownership of dwellings and Real estate</b>	
Real estate	Transaction
Ownership of dwellings	Transformation
<b>Other Services</b>	
Government	Transaction
Private	Transformation



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- In trade wholesale and retail traders are engaged mainly in the transfer of ownership of goods from producer to the consumer.
  - Public administration and defense are pertain to the enforcement of contracts and the protection of property rights.



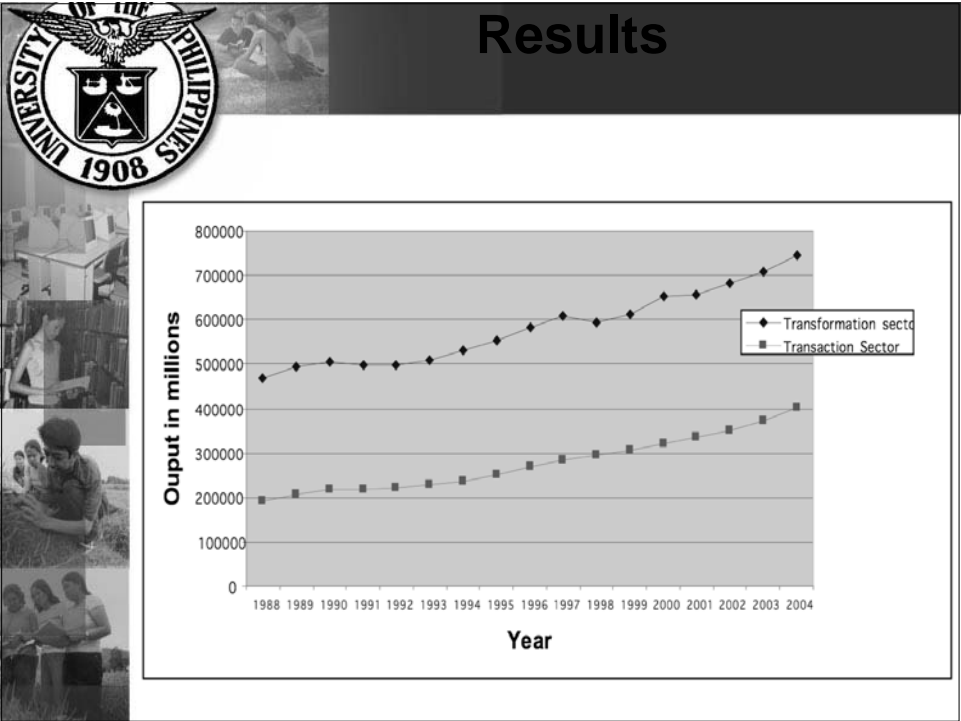
- Communication is involved in the spread and exchange of information vital to transacting.
- The transport sector is also included as no trade of physical goods and services can happen without transport




- Time period from 1988 to 2004 is examined.
- Support ratio - defined as the ratio of the transformation sector output to the transaction sector output.
- Indicates the amount by which the transformation sector output is supported by 1 monetary unit worth of transaction services.

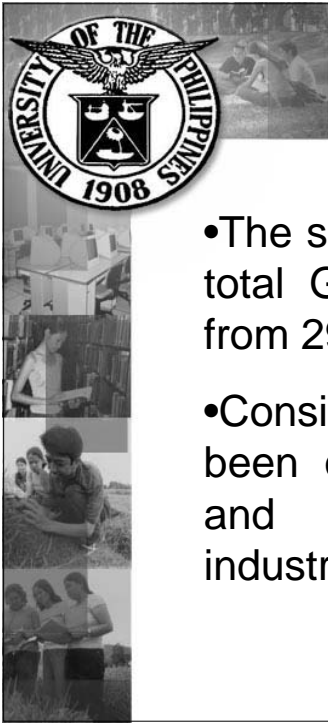



- If the goal is transaction cost minimization, the support ratio can be considered a measure of economic welfare.
- Society should desire to increase support ratio as output increases or at least maintain it at the given level.






- The transaction output increasing from Php 191.2 billion in 1988 to Php 402.8 billion
- The transformation output from Php 467.4 billion to Php 743 billion by 2004.




- The share of the transaction sector in total GDP has also been increasing from 29% in 1988 to 35% in 2004.
- Consistent with the trend that has been observed by Wallis and North and other previous studies in industrialized countries.

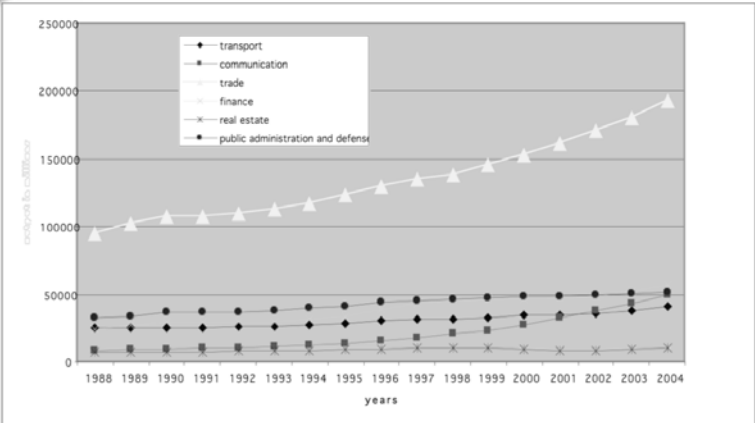


## Rising Transaction Costs

- The development of the market economy
- Technological change and economies of scale
- Declining use of the political system to restructure property



## Subsector Trends



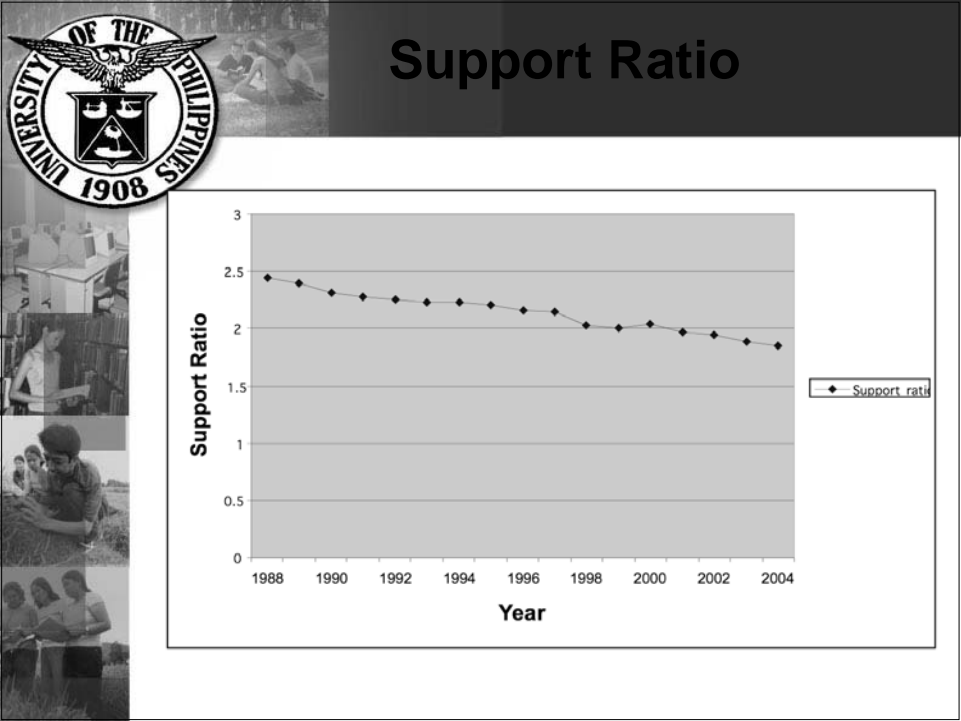
Year	transport	communication	trade	finance	real estate	public administration and defense
1988	30000	10000	95000	10000	10000	30000
1989	32000	11000	105000	10000	10000	32000
1990	34000	12000	110000	10000	10000	34000
1991	36000	13000	115000	10000	10000	36000
1992	38000	14000	120000	10000	10000	38000
1993	40000	15000	125000	10000	10000	40000
1994	42000	16000	130000	10000	10000	42000
1995	44000	17000	135000	10000	10000	44000
1996	46000	18000	140000	10000	10000	46000
1997	48000	19000	145000	10000	10000	48000
1998	50000	20000	150000	10000	10000	50000
1999	52000	21000	155000	10000	10000	52000
2000	54000	22000	160000	10000	10000	54000
2001	56000	23000	165000	10000	10000	56000
2002	58000	24000	170000	10000	10000	58000
2003	60000	25000	175000	10000	10000	60000
2004	62000	26000	180000	10000	10000	62000





- Trade accounts for most of the output of the sector followed by public administration and defense.
- Trade's share of the transaction output however has declined through the years beginning at 49.8 % in 1988 and decreasing to 47.8% in 2004.



- The share of communications on the other hand jumped from a mere 4% in 1988 to more than 12% in 2004.
- The same is true for finance, starting out at around 12% transaction output share in 1988 and increasing to 14% in 2004.





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- The support ratio has been declining over time.
  - A peso of transaction services support less and less transformation sector output over time.
  - Starting from 2.45 in 1988, it has decreased to 1.84 in 2004.




## Transaction services

- Implies that transaction services have been growing at a faster rate than transformation sector output.
- In order to capture the potential gains from productivity increases, the economy has been spending proportionately more on transacting.





## The decline in the support ratio

- Shift of non-market transaction services to the market
- Changes in institutional framework
- Change in consumers' tastes and preferences
- Factor and product market imperfections




## Summary

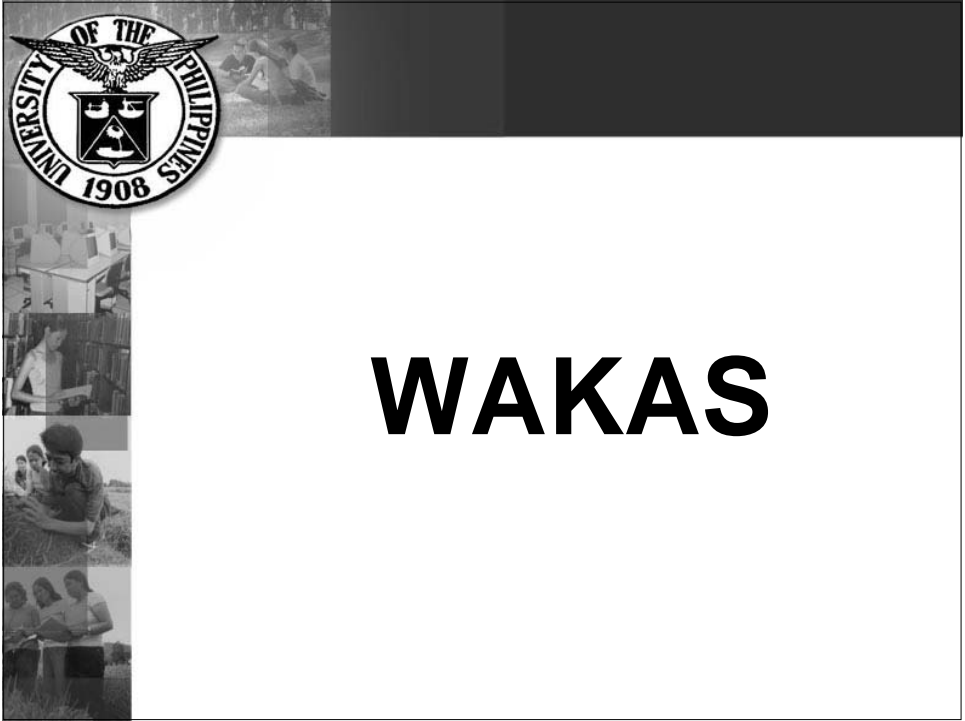
- Transaction sector output increases through time as transformation activities also expand.
- What is presented here however is admittedly an underestimation of the transaction cost
- Fails to account for transaction activities in non-transaction industries



## A Word of Caution

- Classification
- Statistical data compilation
- Individuals in all occupations perform both types of activities
- Only the costs of market transactions are mirrored in the transaction sector.





**WAKAS**