A map of the Metro Vancouver region, showing various municipalities and districts. The map is overlaid with a large white text box containing the title of the presentation. The text is centered and reads: "A NEW METHODOLOGICAL ATTEMPT TO IDENTIFYING THE REGIONS EXPORT BASE; A CASE STUDY ON CHANGE IN METRO VANCOUVER'S EXPORT BASE; 1991-2006". The map labels include: LIONS BAY, NORTH VANCOUVER DISTRICT, BELCARRA, WEST VANCOUVER, VANCOUVER CITY, BURNABY, COQUITLAM, MAPLE RIDGE, VANCOUVER, WESTMINSTER, RICHMOND, DELTA, SURREY, WHITE ROCK, LANGLEY CITY, and LANGLEY TOWNSHIP. There is also a label for "ELECTORAL AREA A" pointing to a specific region.

**A NEW METHODOLOGICAL ATTEMPT TO
IDENTIFYING THE REGIONS
EXPORT BASE;
A CASE STUDY ON CHANGE IN METRO VANCOUVER'S
EXPORT BASE; 1991-2006**

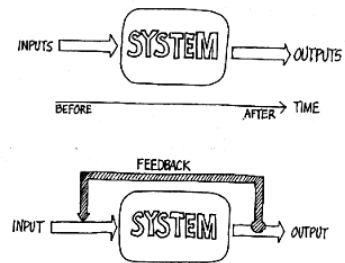
**Canadian
Association of
Planning
Students
annual
conference**

**Alireza F. Farahani
Master of Urban Studies Program
Simon Fraser University**

EXPORT BASE THEORY (EBT)



- ⊙ Douglass North: **particular attention should be paid to the exogenous, or basic, sectors**
- ⊙ Central role in LED but criticized



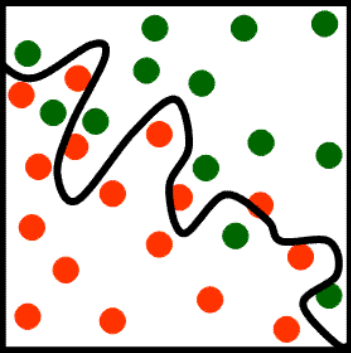
- ⊙ Storper provides a new dynamic perspective: feedback loops
 - ⊙ Instead of picturing the city as machine of financial capital, or of multinational enterprises, or an information processing machine,
 - ⊙ The city could be seen as a **“social organization of economic reflexivity”** which includes many feedback loops
- ⊙ Export base as carriers and sources of reflexivity and identity
- ⊙ The problem of methodology!



PRACTICED METHODS AND PROBLEMS: MIN. REQUIREMENT AND LQ



- ⊙ Using SIC or NAICS industry categorizations for employment in different sectors based on Census
- ⊙ To figure out what industry has the region concentrated in:
 - ⊙ MR: in comparison to the minimum of a bunch
 - ⊙ LQ: in comparison to the nation as the reference
- ⊙ Problems and the needs of a new methodology:
 - ⊙ MR Provides a wide range of off-sets from the base: focus
 - ⊙ LQ is relative to a diverse set of rural and urban areas: realistic
 - ⊙ They both do not show the importance: illustrate importance
 - ⊙ Dependent on the level of categories: overcome problems of classifications
 - ⊙ Communicate change



THE COMBINED MINIMUM METHOD

MR export employment:
Off-set from the minimum of Toronto, Montreal and Vancouver

LQ export employment:
Off-set from the Canada wide relative share of industry

- ⊙ Comparing the employment that is associated with the export-base according to MR and LQ
 - ⊙ Employment above the reference for the export base
- ⊙ In three layers of industrial classification systems
- ⊙ Using the minimum of the comparison which would exclude urbanization effects but also focuses on the core
- ⊙ Example: Business services in Metro Vancouver in 2001 (according to SIC)
 - ⊙ Division level: 117245 (11.2% employment) MR: 5446 (3.6% of export employment) LQ: 29747 (28.3%) CM: 5446 (9.1%)
- ⊙ Used for different levels to provide a picture

METHODOLOGICAL RESULTS (1): FOCUSING ON THE CORE EXPORT BASE

LQ export
employment:
Over-
estimating
urbanization
related
industries

Table 1- 1991 LQ employment based on SIC divisions	Export jobs based on LQ			LQ Based Percentage of export of industries		
	Van.	Mon.	Tor.	Van.	Mon.	Tor.
Division A - Agricultural and related service	0	0	0	0.0%	0.0%	0.0%
Division B - Fishing and trapping	0	0	0	0.0%	0.0%	0.0%
Division C - Logging and forestry	0	0	0	0.0%	0.0%	0.0%
Division D - Mining, quarrying and oil well	0	0	0	0.0%	0.0%	0.0%
Division E - Manufacturing	0	67216	63076	0.0%	41.7%	23.8%
Division F - Construction	6382	0	0	6.7%	0.0%	0.0%
Division G - Transportation and storage	11570	8124	0	12.1%	5.0%	0.0%
Division H - Communication and other utility	2529	10046	10624	2.6%	6.2%	4.0%
Division I - Wholesale trade	14620	17865	18950	15.3%	11.1%	7.2%
Division J - Retail trade	0	404	0	0.0%	0.3%	0.0%
Division K - Finance and insurance	5952	17194	60255	6.2%	10.7%	22.7%
Division L - Real estate operator and insurance	10115	0	16037	10.6%	0.0%	6.1%
Division M - Business service	20250	25467	84735	21.2%	15.8%	32.0%
Division N - Government service	0	0	0	0.0%	0.0%	0.0%
Division O - Educational service	0	0	0	0.0%	0.0%	0.0%
Division P - Health and social service	0	7706	0	0.0%	4.8%	0.0%
Division Q - Accom., food and beverage service	10040	0	0	10.5%	0.0%	0.0%
Division R - Other service	14277	7024	11270	14.9%	4.4%	4.3%
Sum of all export jobs Divisions	95736	161046	264947			
Percentages of all employment Divisions	10.8%	9.7%	12.0%			

METHODOLOGICAL RESULTS (2): FOCUSING ON THE CORE EXPORT BASE

MR export employment: Looses focus and underestimates the role of core export base

Table 2- 1991 MR employment based on SIC divisions	Export jobs based on MR			MR Based Percentage of export of industries		
	Van.	Mon.	Tor.	Van.	Mon.	Tor.
Division A - Agricultural and related service	6236	0	1443	5.4%	0.0%	0.5%
Division B - Fishing and trapping	2796	0	50	2.4%	0.0%	0.0%
Division C - Logging and forestry	3497	0	141	3.0%	0.0%	0.0%
Division D - Mining, quarrying and oil well	1748	0	1642	1.5%	0.0%	0.6%
Division E - Manufacturing	0	125250	139618	0.0%	57.1%	48.2%
Division F - Construction	15324	0	17317	13.2%	0.0%	6.0%
Division G - Transportation and storage	16332	17112	0	14.0%	7.8%	0.0%
Division H - Communication and other utility	0	5272	4327	0.0%	2.4%	1.5%
Division I - Wholesale trade	7009	3497	0	6.0%	1.6%	0.0%
Division J - Retail trade	2147	5704	0	1.8%	2.6%	0.0%
Division K - Finance and insurance	0	5958	45435	0.0%	2.7%	15.7%
Division L - Real estate operator and insurance	10552	0	17125	9.1%	0.0%	5.9%
Division M - Business service	6759	0	51146	5.8%	0.0%	17.7%
Division N - Government service	0	8325	9266	0.0%	3.8%	3.2%
Division O - Educational service	946	4021	0	0.8%	1.8%	0.0%
Division P - Health and social service	12325	36251	0	10.6%	16.5%	0.0%
Division Q - Accom., food and beverage service	20059	8118	0	17.2%	3.7%	0.0%
Division R - Other service	10556	0	2006	9.1%	0.0%	0.7%
Sum of all export jobs Divisions	116284	219509	289517			
Percentages of all employment Divisions	13.2%	13.2%	13.2%			

METHODOLOGICAL RESULTS (3): FOCUSING ON THE CORE EXPORT BASE

CM export employment:
Concentrates on export base but also moves out urbanization related off-sets

Table 3- 1991 CM employment based on SIC divisions	Export jobs based on CM			CM Based Percentage of export of industries		
	Van.	Mon.	Tor.	Van.	Mon.	Tor.
Division A - Agricultural and related service	0	0	0	0.0%	0.0%	0.0%
Division B - Fishing and trapping	0	0	0	0.0%	0.0%	0.0%
Division C - Logging and forestry	0	0	0	0.0%	0.0%	0.0%
Division D - Mining, quarrying and oil well	0	0	0	0.0%	0.0%	0.0%
Division E - Manufacturing	0	67216	63076	0.0%	68.5%	34.7%
Division F - Construction	6382	0	0	10.2%	0.0%	0.0%
Division G - Transportation and storage	11570	8124	0	18.5%	8.3%	0.0%
Division H - Communication and other utility	0	5272	4327	0.0%	5.4%	2.4%
Division I - Wholesale trade	7009	3497	0	11.2%	3.6%	0.0%
Division J - Retail trade	0	404	0	0.0%	0.4%	0.0%
Division K - Finance and insurance	0	5958	45435	0.0%	6.1%	25.0%
Division L - Real estate operator and insurance	10115	0	16037	16.2%	0.0%	8.8%
Division M - Business service	6759	0	51146	10.8%	0.0%	28.1%
Division N - Government service	0	0	0	0.0%	0.0%	0.0%
Division O - Educational service	0	0	0	0.0%	0.0%	0.0%
Division P - Health and social service	0	7706	0	0.0%	7.8%	0.0%
Division Q - Accom., food and beverage service	10040	0	0	16.1%	0.0%	0.0%
Division R - Other service	10556	0	2006	16.9%	0.0%	1.1%
Sum of all export jobs Divisions	62431	98177	182028			
Percentages of all employment Divisions	7.1%	5.9%	8.3%			



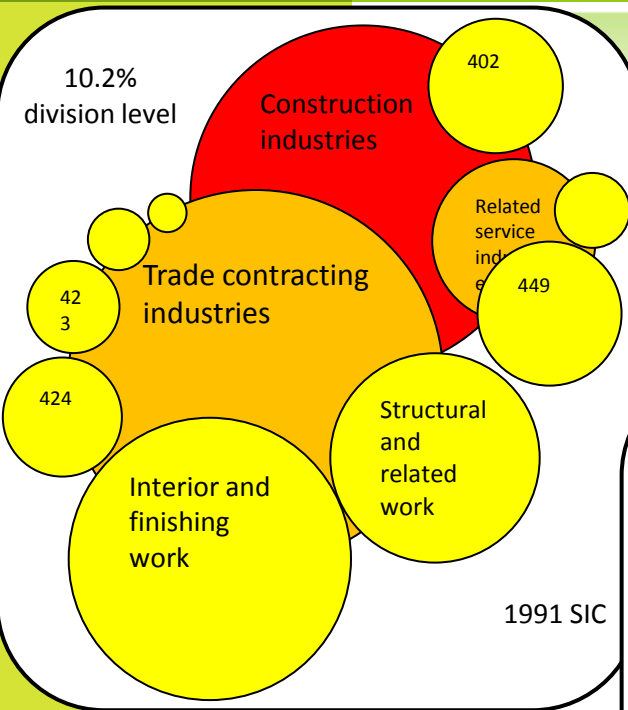
RESULTS ABOUT METRO VANCOUVER

- ◎ Three behaviors in the core export base evolution of Metro Vancouver:
 1. Declining industries: wood, construction and wholesale
 2. Retaining core industries: real estate industry, transport sector, food services and business services
 3. Emerging industries: education industry, financial services and cultural industry

- ◎ Categorization is based on different levels of classifications as described in the following slides and according to concordance tables in 2001 between SIC and NAICS

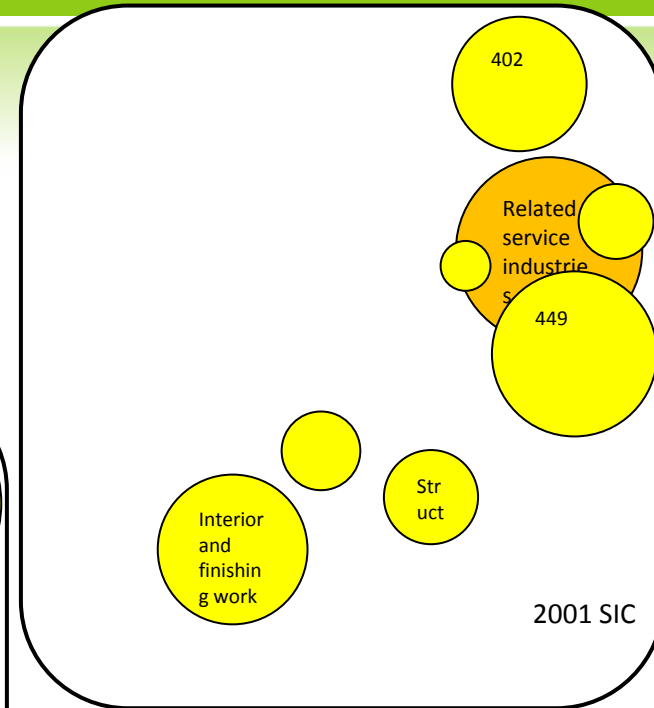
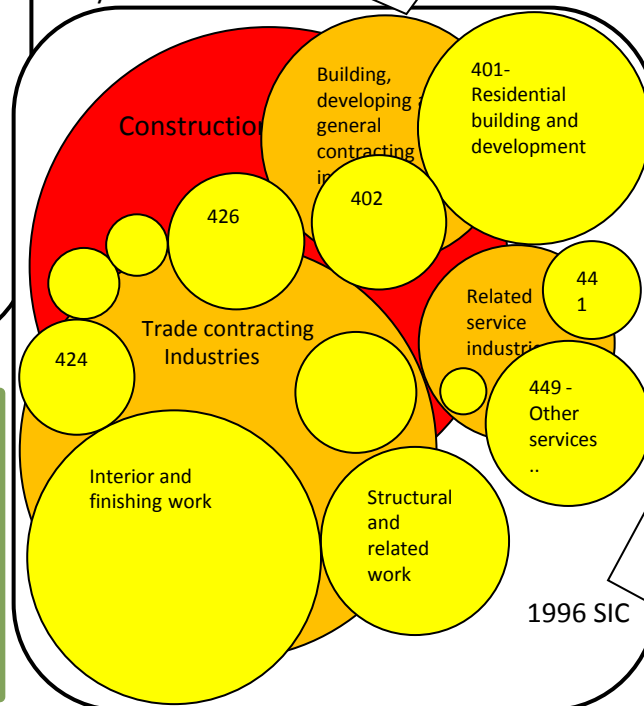
1. CONSTRUCTION INDUSTRY

EXAMPLE OF DECLINING INDUSTRIES



20.9% division level
Less important change in yellow level

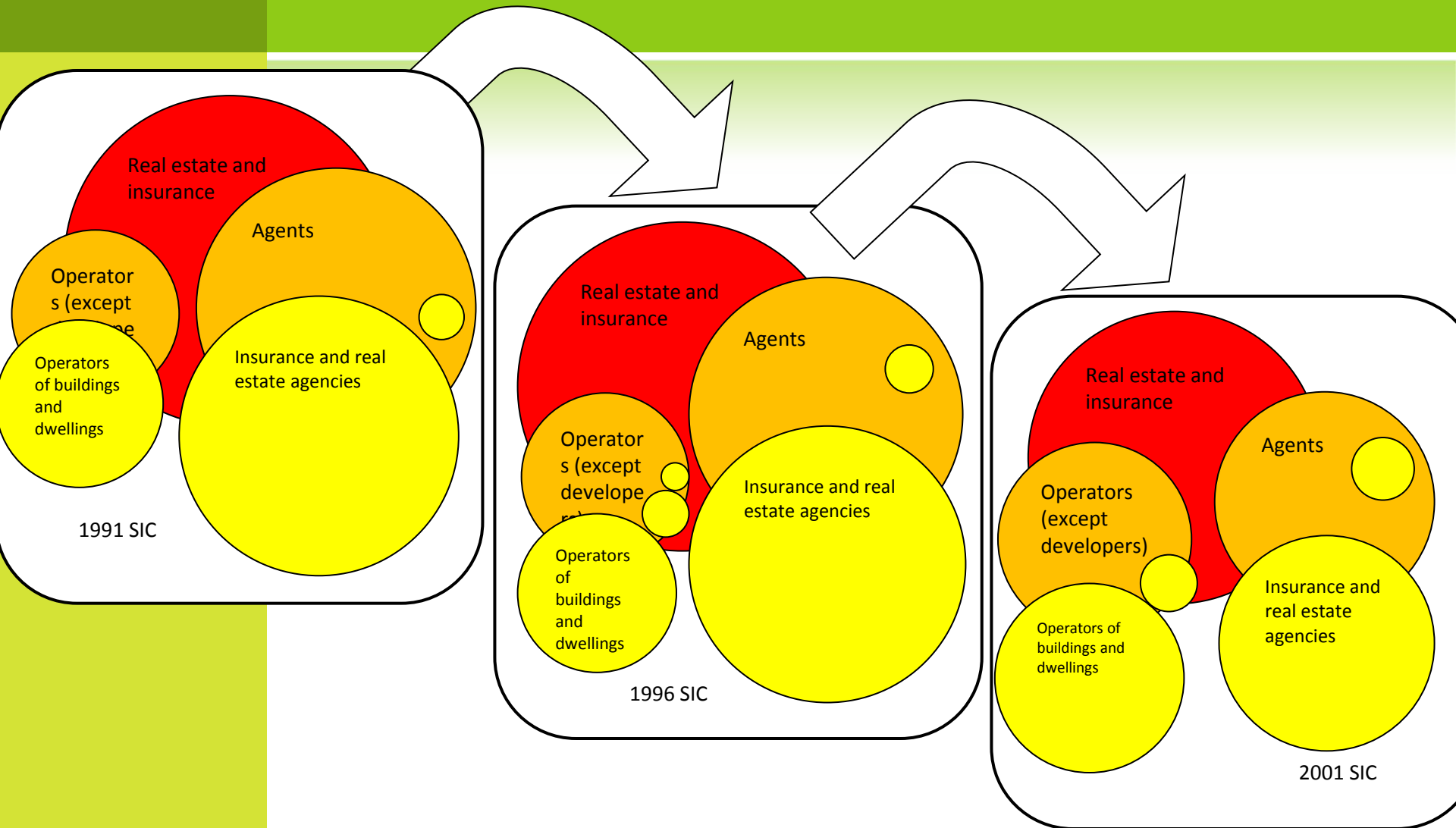
No division level presence
Decline of yellow and orange level



The area of the circles represents the number of that industry's (or major group, or sector, etc) export employment

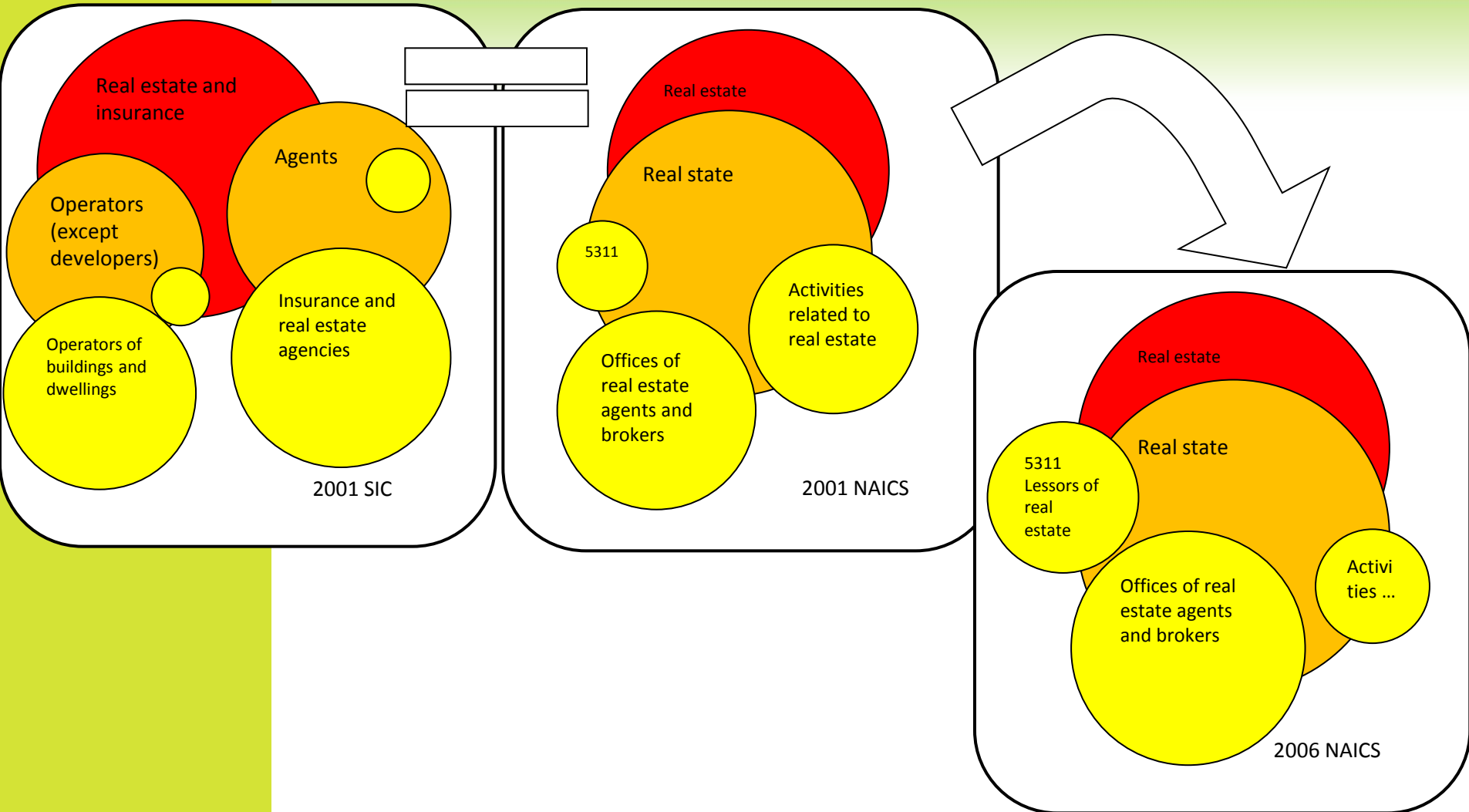
2. REAL ESTATE; 1991 TO 2001

EXAMPLE OF RETAINING INDUSTRIES



3. REAL ESTATE; 2001 TO 2006

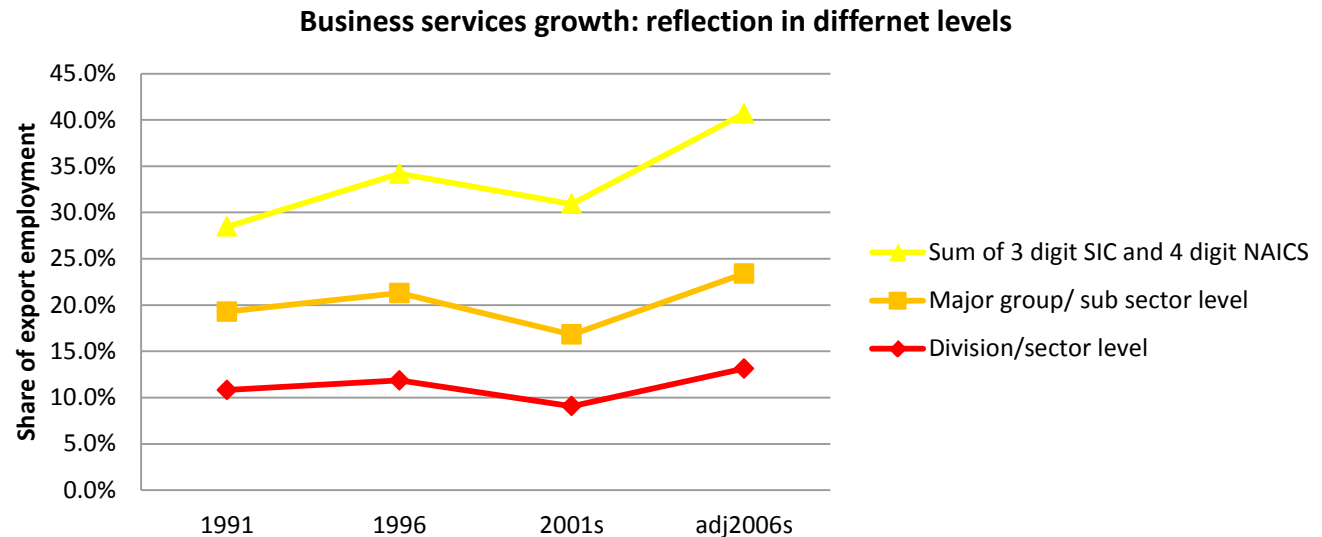
THE CONCORDANCE BETWEEN SIC AND NAICS



4. BIZ INDUSTRIES

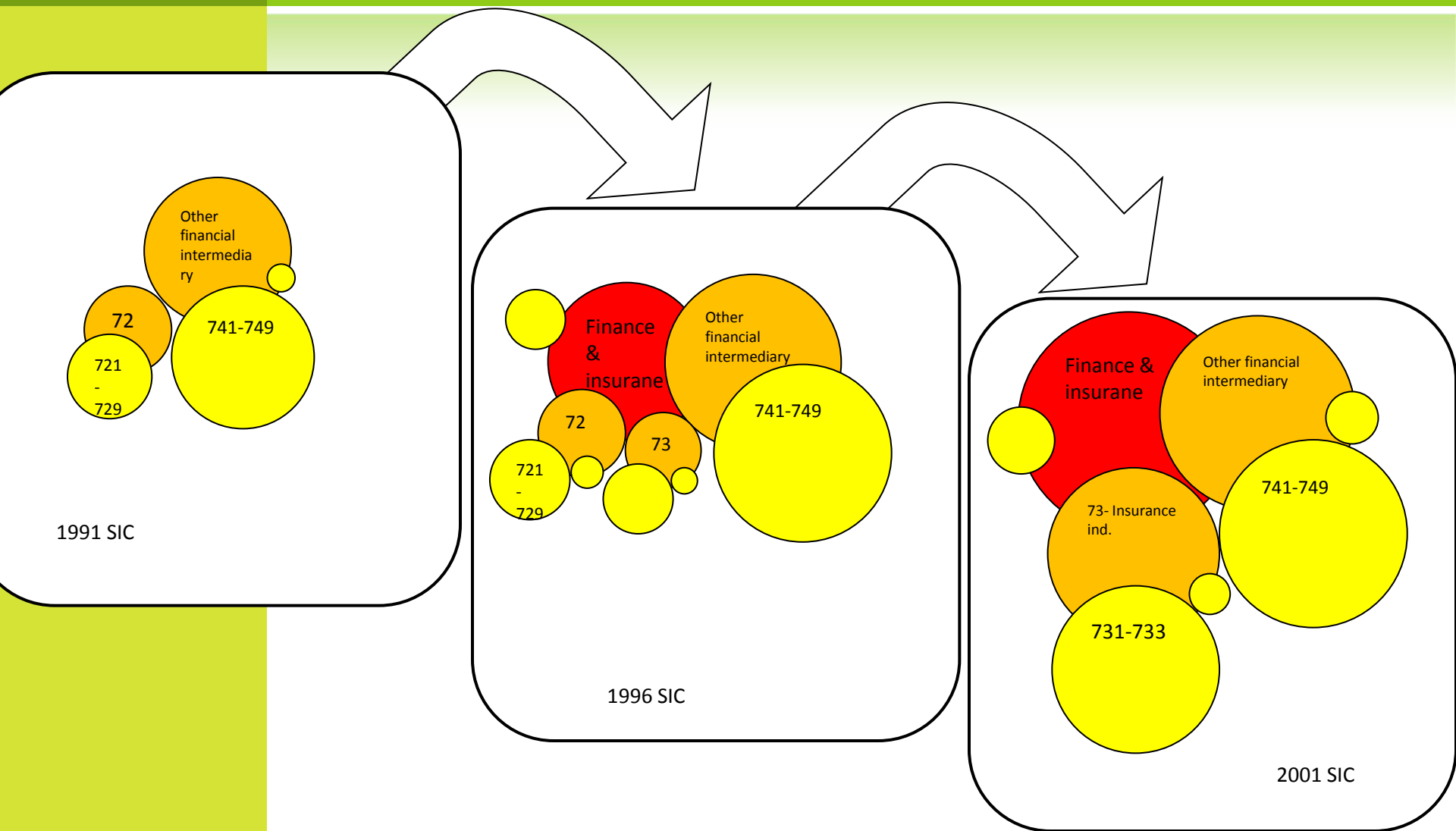
EXAMPLE OF DIFFERENCE BETWEEN DIFFERENT LAYERS

- ◎ Biz services: considering the adjusted 2006 data
- ◎ The importance of architecture and engineering



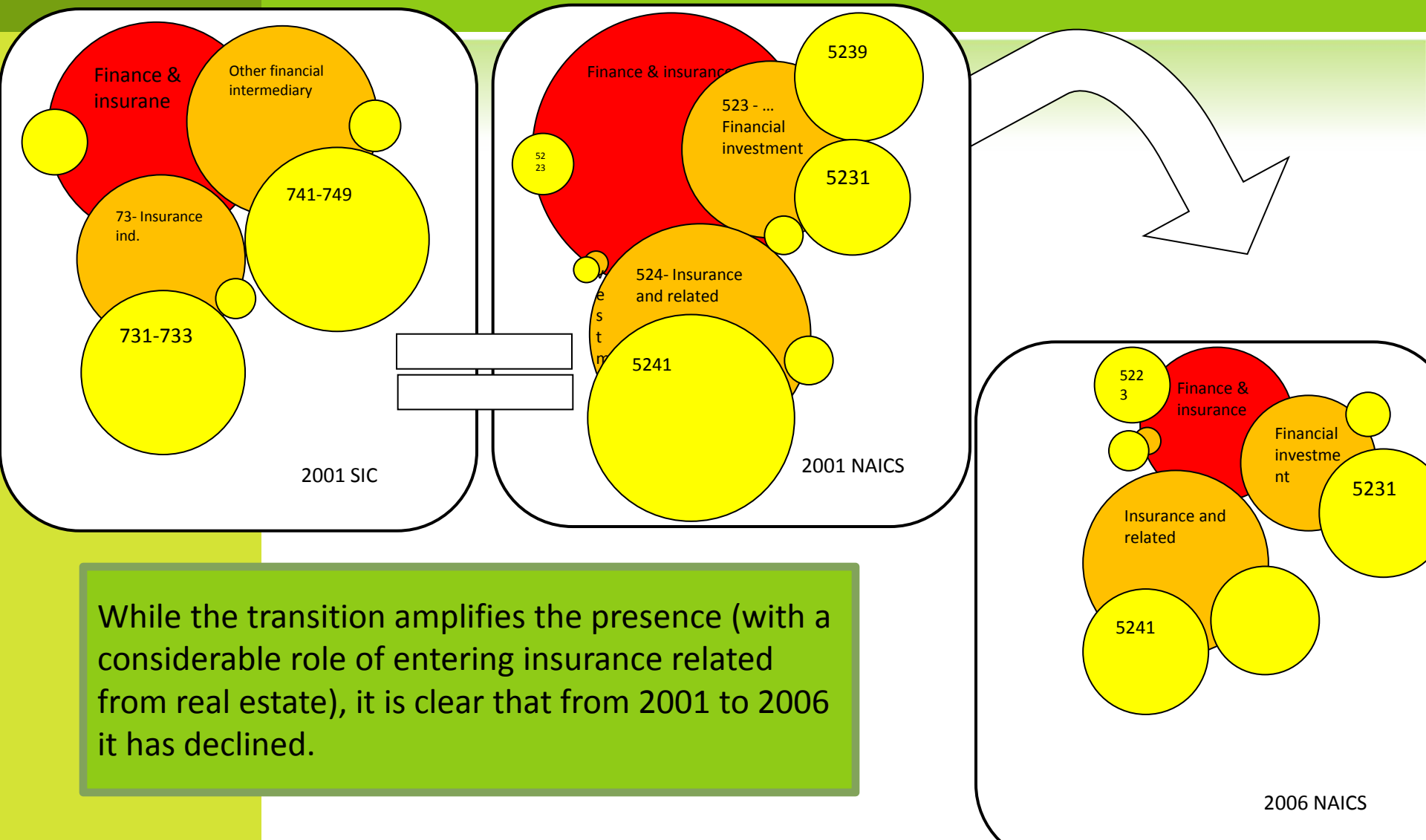
- ◎ Tourism or food services!
- ◎ Transportation and warehousing: base on water and air; consider the growth in water services and relation of air with tourism.

5. EXAMPLE OF EMERGING INDUSTRIES: FINANCIAL SERVICES; SIC BEFORE 2001



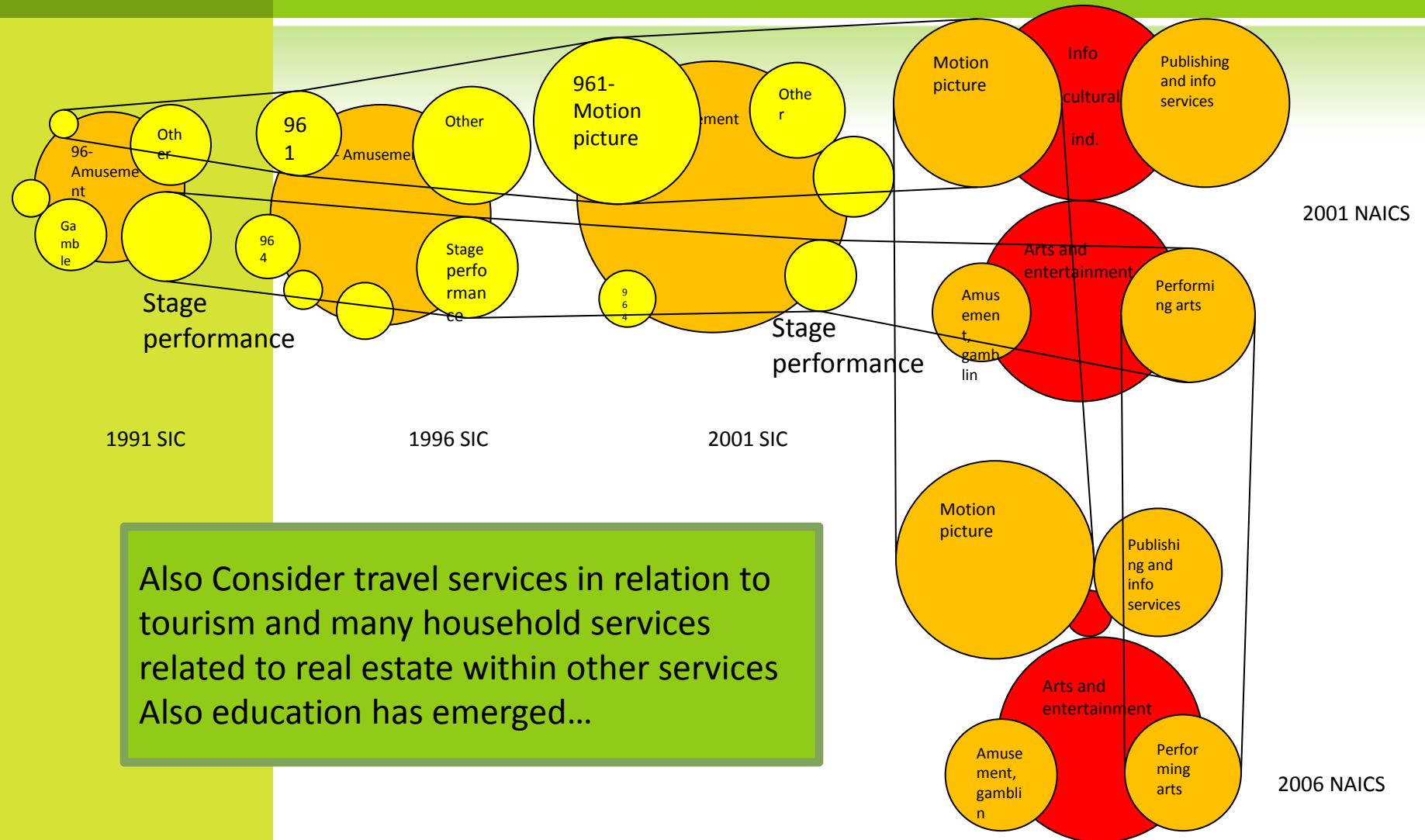
6. FINANCIAL SERVICES: TRANSITION AND AFTER 2001; EXAMPLE OF AMPLIFICATION BY NAICS

14



While the transition amplifies the presence (with a considerable role of entering insurance related from real estate), it is clear that from 2001 to 2006 it has declined.

EMERGING INDUSTRIES: CULTURAL INDUSTRIES



Also Consider travel services in relation to tourism and many household services related to real estate within other services
Also education has emerged...

CONCLUSION

1. Introducing Metro Vancouver, the way Storper introduces LA, NY, London and Paris: three core industries...Real estate, biz services and tourism
2. The relation of other sectors and specially their yellow representation with these three core sectors
3. Consider base analysis as first step in LED, need for Value chain analysis
4. CM method provides the big picture and clues for in-depth study of reflexivity

THANKS FOR PAYING ATTENTION

⊙ Questions?

