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Differentiations among Brothers: Urban Development in Three Shanghai Urban Districts

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In explaining differentiations in urban development pattern and magnitude among cities and communities in the US, many factors have been explored. These factors range from public policy from the public sector, the behavior of the marketplace from the private sector, and community features, especially the social (race) and economic (class) background of a community. It is well accepted that development differences largely attribute to the interaction of these factors. However, since American urban communities differ so significantly in race and class, it is hard to measure how and to what extent public policy integrated with other factors contributes to the differences. Impacts of a community's race and class background may be mixed with other factors in analyzing development differences. A case in which race and class differences among communities are limited will enable us to focus on the policy issue, and to reveal the mechanism how policy works with other factors in a given context.

Shanghai, China's largest city and its economic center, may provide such a case. Shanghai's population is predominantly Han nationality, less than 0.01% of the city's 1.3 million residents are with other ethnic background. Also, under the control of a socialist government for 50 years, the class difference (measured by social status) was reduced to a lower level (but it is re-appearing in the reform years). So the city has a relatively "homogeneous" population and it is composed of relatively "homogeneous" communities compared to American cities in race and class composition. On the other hand, differences in urban development among the city's districts are apparent. The differences thus suggest that factors other than race and class may contribute to uneven development.

The paper intends to explore factors contributing to development differences among urban districts and focuses on the impacts of public policy-- how and to what extent policy works together with other factors, especially community features in causing differences. Shanghai is used as a case, not only because in this big city development differences among districts are apparent, and there are many factors for the uneven development pattern due to the city's rich history and economic base, but also because of the availability of data.

The study starts from profiles of the city and its urban districts, followed by a comparison of development differences among three urban districts. Huangpu district is the CBD. Luwan is the main retail and residential area and now has been planned to be a "world class" commercial district. Yangpu is a traditional industrial zone with a concentration of

manufacturing factories. Development pattern and magnitude defer significantly among the three districts since the 1990s. The main part of the article is an analysis of the impacts of policies adopted by the municipal and district governments in promoting economic growth in the last decade. In the conclusion section, main findings will be discussed. The key argument is that the pro-growth policy, which is considered a success for China's transitional economy, is the main cause of uneven development among Shanghai's districts. The real challenge is thus not whether to adopt a pro-growth policy, but how to evenly distribute the costs and benefits brought about by the policy.

Data used in the study are collected in interviews with six directors of planning bureaus of the three districts in the summer of 2001. Secondary data come from statistical yearbooks, district history books, and district fact books of Shanghai and district from 1985 to 2001.

A profile of Shanghai and its urban districts

As China's largest city and economic center, Shanghai has a population of 13.2 million (11.4 million in the urban area) and a land area of 6,341 square km (3,924 in its 16 urban districts) in 2000. The city government reports directly to the central government, a status similar to Washington D.C. in the US.

The city became China's economic center in the 1930s. Financing, trading, and manufacturing industries formed the base of the city's economy. After the Chinese Revolution in 1949, the financing industry was nationalized and almost disappeared, Shanghai then became China's manufacturing center, especially for light industry. From 1950 to 1976, Shanghai contributed one sixth of the nation's revenue with a population of only one percent of the nation. The Shanghai harbor treated one third of the nation's import and export cargoes in 1985. The city's export alone counted one sixth of the nation in the same year. The cost to the city is a much old and over-used infrastructure system, from street network to housing. Housing, traffic congestion, and poor environmental quality were listed by residents the three top challenges facing the city in the early 1980s.

With the carrying out of the reform policy in 1978, China's as well as Shanghai's economy has grown rapidly. Table 1 shows the increase of Shanghai's total GDP from 1978 to 2000. The GDP of 2000 is 750% as that of 1978, an annual growth rate of over 10% in the period. The growth is partly a result of the change of city's economic base, which is an outcome of the reform policy. Shanghai's economy has shifted from a manufacturing-oriented to a service-oriented one. Table 2 demonstrates changes of the composition of Shanghai's economy. In 1978, manufacturing industry contributed to 77.4% of the city's GDP, the number dropped to 47.6% in 2000, a loss of 38.5% in 22 years. The service industry, on the other hand, increased from 18.6% of the economy in 1978 to 50.6% in 2000.

(Insert table 1 and table 2)

Moreover, the composition of the service industry has changed, as shown in Table 3. In 1978, almost half (45.6%) of the tertiary industry was retail, wholesale and catering, and 23.7% was from transportation, postal and telecommunication. The real estate industry counted only 0.5% of the service sector, and the financing business was only 13.8% of the sector. In 2000, the largest share in the tertiary sector was the financing industry (29.7%), followed by “others” meaning consulting, tourist, educational, and cultural businesses (24.6%). The real estate industry increased to 10.9% of the amount of the service sector in 2000.

Today, Shanghai is the number one financing and trading center in China, and is becoming a key regional financing and trading center in East Asia. The central government positions Shanghai as “the international trading, porting, and financing center of the 21st century.” (Kong, 2001) This goal was initiated by the municipal government in the middle 1990s and supported by the national government. In order for the city to reach the goal, policies at both the national and local level have been formulated and implemented. A detailed discussion will be in the following sections.

(Insert table 3)

Shanghai’s administration system has been changed many times in the last two decades, both in its classification system (urban-rural) and in boundary adjustment. In 2000, the city had 16 urban districts and 4 rural counties. (All counties have been converted to “districts” in 2001.) An urban district could be as large as a big city in the US. Yangpu district, for instance, had a population of 1.1 million in 2000. Among the 16 urban districts, nine are “old” urban districts, which means being located within the urbanized area before 1978. One district, Huangpu, is the outcome of the merge of (“old”) Huangpu and Nanshi district in 2000. The change of the classification system and the adjustment of district boundaries makes it hard to conduct a consistent analysis in measuring changes, especially in comparing changes of district shares in the city’s total over the last decades.

Table 4 summarizes statistics of the three district analyzed in the study: Huangpu, Luwan, and Yangpu. All the three are “old” urban districts, so they are “brothers”. But they have considerable differences in history, geographic location, economic base, and urban development pattern and magnitude, as shown in Table 5.

(Insert table 4 and table 5a, 5b, 5c)

Huangpu, located in the center of the city, is traditionally the CBD of Shanghai, and the home of the municipal government and most of its agencies. The area managed by the district was the core of the British concession from 1845 to 1940, before the Japanese occupied Shanghai. Many buildings, including those in the riverfront area known as “The Bund”, were used as headquarters of banks and international corporations. Nanjing Road, the main retail street in the district, was, and still is, the number one shopping street in China. The economy of the district is thus largely defined by trading and retailing businesses, even after the Communist Revolution. This position is reflected in the district’s building uses: in 1985, out of total of 10.65 million square meters of building

areas, 4.84 million was for “non-residential uses”, meaning office, commercial and retail uses. Offices (1.27 million sq. m.) and shops (0.56 million sq. m.) were 37.8% of the total non-residential used buildings. Office building in Huangpu alone took 29.9% of all office space in the city. (Table 5c)

Luwan is located in the south-central of the city. The district was the French concession from the 1890s to the 1930s. Shops of luxurious goods, especially fashion and shoes, featured the main shopping street in the district. Also, there was a concentration of villa and expensive apartment buildings. In 1985, both the areas of villa (120,000sq. m.) and apartment buildings (190,000sq. m.), the best quality housing, in Luwan exceeded the sum of that in the two other districts. The retail business forms the foundation of the district’s economy. For example, 57.5% of the district’s tax revenue was from retail and catering in 1998. (LSYB, 1999)

Yangpu became the city’s main industrial zone in the 1920s in part because of its location to the Huangpu River, the main waterway of the city. The district received a considerable amount of public investment in manufacturing factories in the period of the 1950s to 1965, during China’s industrialization. Most public investment went to heavy industry, the share of investment in heavy industry was 93.9% of the total from 1949 to 1959. As a result, the district with its large population was the city’s “backbone” for 30 years, especially in the 1950s and 1960s when the district contributed one fifth of the city’s revenue, peaked in 1964 with a share of 29.3% of the city’s total revenue. (ECHY, 1995) Even in the 1980s when the reform was just started, the district still had 14% of the city’s factories, and contributed 26% of the city’s total industrial output in 1985. (SMSB. 1986) However, the district’s position was challenged after the service industry oriented economic restructuring in the 1990s.

Differentiations in urban development after the reforms

The central government has supported the city’s ambition of becoming an international trading, porting, and financing center of the 21st century, as mentioned above. This development goal implicates a dramatic shift of the city from manufacturing to service industry. Since the reforms, especially after the city started the milestone project of the Pudong New District in 1992, a series of policies have been formulated and implemented. The result has been rapid economic growth, and differences among districts by pattern and magnitude of urban development, a byproduct of the new strategy.

Table 6 summarizes differences of urban development in Huangpu, Luwan, and Yangpu district. They are measured by changes in population, land, and the construction and use of buildings from 1985 to 2000.

(Insert table 6)

Huangpu District

After boundary adjustment, the land of Huangpu district reduced by 33.7% and the population dropped by only 3.3%, but the total building area increased by 55.3% from

1985 to 2000. This means both population density and building density have experienced a significant increase--- a typical downtown phenomenon. Population density increased by 46% in the 15 years, the density in 2000 (53370 persons per square km) is the highest in the three districts.

Areas removed from the district in boundary adjustment were basically for lower quality residential buildings, so the remained area could be improved through adding more non-residential uses of high quality developments. The policy of boundary adjustment thus has an impact on urban development difference.

New buildings added in the district are predominantly for non-residential uses. The increase of buildings for non-residential uses was 85.7% from 1985 to 2000, almost three times as the increase for residential uses (29.9%). As a result, per capita non-residential uses building area was almost doubled (91.5%). The district is more a conventional CBD with a heavy concentration of office and retail developments. The amount of office space has increased from 1.27million sq. m. in 1985 to 4.23 million in 2000, an increase of 233.1%, shops also increased by 141.1%.

The overall quality of the district has been improved, evidenced by the significant increase of new buildings (55.3% increase) and the decrease of slum area (- 73.3% in the 15 years). On the other hand, the average residential area of the district is still lower than that of the two other districts, partly due to the high housing price in the CBD. The average housing price in Huangpu was 5800 Yuan (\$707) per square meter in 2000, which is the highest among the three districts.

Luwan District

Although Luwan gained some land in boundary adjustment, its population dropped by one quarter (-25.9%). At the same time, the total building area increased by 58.0%. It is obvious that the district's overall built environment is better now, because less people are using more space. The increase is especially significant for office buildings: total office space in 2000 is 670% as that in 1985. The same is true for shops: shop area increased by 294.4% in the 15 years. Per capita non-residential uses increased by 121.7%, the highest growth rate among the three districts. These changes demonstrate that the district is becoming a booming retail center, or experiencing a "re-birth" of the district's splendid yesterday when the district was the number commercial center for "high class" in the French concession.

Luwan is also becoming a better place to live: good quality housing (new villa and apartment buildings) has increased considerably (33.3% for villa and 57.9% for apartments), while slum area has reduced by 80%. Average housing price was 5700 Yuan (\$695) in the district in 2000. The shift of the land use, such as the decrease of plant buildings (- 27.5%), reveals the shift of district's development goal to more of service industry-oriented, which conforms the city's development strategy.

Yangpu District

Over the 15 years from 1985 to 2000, Yangpu has gained both land (14.5%) and population (9.7%). Many residents moved in are from Huangpu, Luwan and other downtown districts where the housing price has been skyrocketed with the improvement of housing quality. As a result, Yangpu is becoming a residential area for average people: total residential building area increased by 148.0%, while good quality housing has decreased (- 25.0% for villa and no change for apartments). The average housing price in Yangpu was 3,000 Yuan (\$366) per square meter in 2000, lower than that in Huangpu (5,800 Yuan) and Luwan (5,700 Yuan). Yangpu's share of staff housing, the housing for the majority of Shanghai's residents, was 19.7% in 2000. The amount of staff housing in the district is doubled of the sum of that in the two other districts. (Table 5b)

The overall living condition has been improved, evidenced by the decrease of slum area (- 72.7%) and the increase of average residential space (from 8.84sq.m. per capita in 1985 to 19.92sq.m. per capita in 2000). But the amount of slum remained in the district (120,000 sq.m.) is still more than the sum of the two other districts (40,000 sq. m. in Huangpu and 10,000 sq. m. in Luwan).

The district has made efforts to diversify its economic base: while industrial buildings have increased slightly (25.5%), office buildings have increased significantly (148.0%) from 1985 to 2000. However, the amount of office space (620,000 sq.m.) is still much less than that in either Huangpu (4,230,000 sq.m.) or Luwan (1,540,000 sq. m.). Shops have increased as well, but again, the amount (620,000 sq. m.) is less than that in the two other districts (1,350,000 sq. m. in Huangpu and 710,000 sq. m. in Luwan). On the other hand, factories in Yangpu (9,350,000sq. m.) are more than the sum of all plants in the two other districts (1,100,000 sq. m. in Huangpu and 1,160,000 sq. m. in Luwan). It seems that Yangpu's economy still relies largely on manufacturing.

Since no income data is available in Chinese cities, the best measurement for people's economic status is their living conditions, including housing type and housing price. With less good quality housing and lower housing price, it is clear that the district is home for average Shanghai residents.

Analysis: Factors Contributing to Differentiations in Urban Development

There are internal factors and external factors contributing to differences in urban development in the three districts. The main external factor is the development policy at both national and local level, and internal factors are rooted in community features. As community features in American cities generally indicated the race, class, economic and demographic characters of a community, community features in Chinese cities are characterized by the geographic location, the history, the economic base, and the leadership of a community, since race and class differences are relatively less significant.

Internal factors: Community features

Table 7 is a comparison of district features of Huangpu, Luwan, and Yangpu.

(Insert table 7)

1. Location

Location matters in urban development as seen in many cities. Huangpu, located in the CBD and a place hosting the municipal government, is a favorite place to investors and customers as well. Located on the north bank of the Huangpu River with a distance to downtown, Yangpu is less attractive for commercial developments. At the same time, due to the convenience of the district to the waterway system (both Huangpu and Yangtze River) and with a long waterfront exposure, Yangpu became a manufacturing district 80 years ago.

However, disadvantaged location itself does not necessarily mean no development opportunity and possibility. The Pudong New District is on the east bank of the Huangpu River, and there was a “transportation threshold” between Pudong and downtown on the west bank for 40 years, largely due to the 500 meter-width river. (see Map 1) With a policy of developing Pudong to Shanghai’s new financial center, four bridges and two tunnels have been built, and Pudong is now the most favorite place to residents and investors.

2. History

A district’s past has considerable impacts on its development pattern. Huangpu has been Shanghai’s traditional CBD for over 70 years, no other districts can challenge its position. Luwan was the French concession and retail center for “high class” before the 1949 Revolution, its history has fostered a local culture that is rooted in the district’s relation with the French and other Western businesses. The re-birth of the district as a “world class” commercial center has received support not only from the government but also from ordinary residents.

Yuangpu has been a traditional manufacturing district since the 1920s. Port and harbor facilities developed by the British and domestic corporations have played a key role in the district’s industry development. With the shift of Shanghai’s development goal from manufacturing to service industry, Yangpu has lost its importance in the city’ economy. As the number one contributor to Shanghai’s revenue, the district took a 29.3% share of the city’s revenue in 1964, then retained the second main contributor (after Huangpu) in 1989 and 1990, further dropped to lower rank in recent years although no official ranking data is available.

Similar to disadvantages in location, without a splendid history does not necessarily mean less hope. Pudong was an agricultural area for 100 years, it is now the “hottest spot” in urban development in Shanghai and even in the whole country. Government decisions and development policy are more important than history, because policy make history, not history makes policy.

3. Economy

Huangpu’s economic base has always been financing and retail businesses since it founded in the 1850s. But its economy was severely weakened after the 1949 Revolution,

because the nationalization of banks and businesses under the communist government destroyed the district's economic foundation. Not until the carrying out of the reform policy, has Huangpu re-gained its position as Shanghai's economic heart. In terms of land use, spaces for offices (increased by 233.1%) and shops (increased by 141.1%) all have expanded impressively. Although confronting challenges from other districts, especially the Pudong New District, it still holds over a quarter (25.5%) of office space and one fifth (18.6%) of shops in the city's central urban districts. (Table 5c)

Luwan, with less population and limited land, was a "little brother" among Shanghai's districts in terms of economy from 1949 to 1990. But the reform policy provided the district a development opportunity. Given less manufacturing so less pollution in the district, it is relatively easier to convert land to service and residential uses in Luwan than in industrial districts. Luwan's share of office buildings increased from 4.7% of the urban districts' total in 1985 to 9.3% in 2000. The share for shops increased from 6.0% to 9.8% of the urban districts in the same period. These are strong evidences that the district is arising in Shanghai's economy.

Manufacturing industry was, and still is Yangpu's economic base. Textile, steel, machinery and other factories contributed 26.5% of Shanghai's industry output in 1965, and dropped to 14.6% in 1990 (ECHYD, 1995). The importance of the district's manufacturing sector to Shanghai's economy was reflected in Yangpu's land use: its share of plant was 21.4% of the city's urban districts total in 1985. The share increased to 29.8% in 2000, as other districts converting manufacturing land to service industrial uses. However, with the shift of the city's development strategy and policy, many factories are facing the fate of being closed or moved to industrial zones planned in suburban areas. The close of the city's textile industry had laid off 400,000 workers citywide, most are from Yangpu district. The district government has realized the challenge. In the 2000 government report, the director of the district asked for "encouraging the development of both manufacturing and service industry in the Tenth Development Plan" (GYD, 2000).

It is obvious that policy change is the main reason for ups and downs of the economy of all districts.

4. Leadership

Leadership makes difference in urban development outcomes, as many researchers pointed. A number of Huangpu district leaders came from district government agencies. Because of the nature of their jobs and the location of the district that hosts the municipal government, these leaders have more chances to contact and build connections with officials in the municipal government. In China, government jobs and officials' promotion largely depends on officials of the superior government. Connection to the municipal government is thus a critical advantage to district officials for their career. Chen Lian-yu, the current Mayor of Shanghai, was the director of the Huangpu district in the 1980s. Many ex-leaders of the district now are working in the municipal government, they are potentially bridges to current district officials in accessing the municipal government.

In Luwan district, many leaders also start their career from local government, but their connection is more with the retail business and companies. Officials of the Luwan district have a reputation of “official-entrepreneurs” because they are quite sensitive to business opportunities. Once a new policy is adopted by the central or the municipal government and a policy window is opened, these officials have the ability to identify and catch development opportunity brought by the policy. Hang Zheng, the Deputy Mayor in charge of urban development of the city, was the director of Luwan four years ago. Three other deputy mayors, Zhou Yu-peng, Zhou Mu-yiao, and Xie Li-juang, also served in Luwan.

Most leaders of Yangpu came from the manufacturing industry. They are familiar with the manufacturing business rather than urban development. In China, experience is more valuable than education in the manufacturing industry. Many leaders with manufacturing background thus have relatively less education, which makes them less competitive in seeking promotion. No main leaders in the municipal government came from Yangpu district, although Yangpu is the second largest district after Pudong. The situation in turn makes it difficult for district leaders to bring the district’s needs to the municipal agenda.

External factors: the Reform policy

Since China started the reforms in 1978, a series of new policies has been initiated and implemented. At the national level, decentralization has given municipal government more authority in local development decisions, which makes local government able to approach investors, especially foreign investors for urban development. In Shanghai, not only the city government but also district governments can now sign contracts with foreign corporations or developers. Under the planned economy, it was a restricted central government authority.

More important, after the separation of land ownership (owned by the nation in urban areas) from land use rights (as a commodity allowed for free trading) as defined in the 1988 constitution, land use rights have become a critical resource, and land use decision has become a full local power. This practice significantly contrasts to the pre-reform era when land was considered a public property rather than a commodity, and the central government intervened directly or indirectly into local land use decisions. The “project registration” process (“li-xian” in Chinese, meaning to register all projects with the National Planning Committee for the approval of investment and land acquisition) was a main means in controlling local development magnitude. Today, only large projects (over \$50 million) will have to be filed to the central government, but it is for record, not approval.

Local government realizes the importance of the “land revenue”, because the trading (leasing or transferring) of land use rights generates considerable amount of income to local government, which in turn stimulates local government’s desire of leasing more land. With limited vacant land available in the central area, converting current “lower value” land uses to “high value” uses through land leasing is a common practice by local government. The practice is given a name as “adding land value” (*tudi zhihuang*).

Economically, the nation's economy has shifted from "self-sufficiency" to a export-oriented one. In the globalized world, factories are challenged either to produce for export or face the fate of shutting down. In promoting the export of goods and services (labor in most cases in China), new development strategy gives priority to the tertiary industry. To developing Shanghai into an international trading, porting, and financing center reflects this new direction.

Decentralization of economic decision power, separation of land use rights from land ownership, and emphasizing export and the tertiary industry are three national policies that have brought significant impacts to urban development from land use patterns to magnitude of new construction. CBDs have been emerging or re-emerging in Chinese cities. The inner circle of the central area, used to be a mixed-use zone of residential and manufacturing, has become a place to house high-income residents. Investment in downtown office and commercial buildings increases rapidly. Many factories in the central area have been closed or moved to suburbs to give ways to retails, offices, and high quality apartments. In remote suburbs, "industrial development zones" are new home for joint venture or high tech factories. In between the central area and the industrial zones are housing projects for average residents. The rapid expansion of urbanized area to ex-urban land shows the Chinese version of urban sprawl.

At the local level, cities have conformed to the national shifts and taken advantage of the new policies in various ways. Urban development is the most visible evidence revealing local reactions.

Shanghai has experienced three stages in post-reform urban development. From the 1980s to early 1990s, housing was the focus of government efforts. Starting from 1990, infrastructure, especially transportation projects became the main development activities. Finally, since 1998, the city's focus has shifted to environmental improvement, such as water quality improvement, and the increase of open space and public parks. The outcomes of Shanghai's urban development efforts include 120 million square meter of housing, 3,000 high-rises buildings, four bridges and two tunnels connecting the east and west bank of the Huangpu River, two subway lines crossing the city, and 62 km of elevated expressway forming the inner-ring road. The achievements got help from the \$45 billion foreign investment from 1990 to 2000, and a considerable portion of the investment is paid for land leasing. A research found that the land leasing revenue reached 81 billion Yuan (about \$10 billion) from 1988 to 1996 in the city. (Zhao, M. 1998. *The Reform of land use regulation and urban development*, Shanghai: Tongji Univ. Press)

The distribution of urban development is uneven, as discussed above. Three important policies affect development pattern and magnitude at the local level: land leasing, shift economic development emphasis from manufacturing to service industry, and the removal of the equalitarian revenue policy practiced in the pre-reform era.

Land leasing

When land use rights are allowed for free trading, the immediate reaction is from developers. Land in downtown and other strategic locations, such as in Luwan district, attracted both domestic and foreign investors. In responding to the demand, district governments adopted different strategies. In some districts, ambitious leaders caught the opportunity quickly and designed policies in favor of developers. For instance, district government helped development companies in relocating residents for land acquisition, sometimes even using its administration power. The result is a building boom in these districts. Luwan is an example. A total of 340,000 square meters slum area has been transformed into high quality residential and commercial developments with the investment from Hong Kong and Taiwan. Per capita building area in the district increased by 112.9% in 15 years, the highest rate among the three districts. The achievement relies heavily on revenue from land leasing. The director of the district planning bureau said: “We caught the opportunity brought by the 1990 land management reform, that was the milestone for the development of our district.” (Interview in July 2001) In fact, the first land leasing case in Shanghai took place in Luwan: on January 12, 1992, just a week after the municipal government approved the land leasing regulation, Luwan leased the first piece of land to a Hong Kong developer, followed by a case in Huangpu a month later. (Kong, 2001)

In other districts, either because land does not attract much attention to foreign developers due to the location, or leaders are too conservative to adopt innovative policies, land leasing revenue was less and development magnitude, especially developments of high quality, is less. Yangpu, in part because of its location, is the case. Most new buildings are developed by domestic investment for affordable housing to average residents, rather than expensive commercial and retail spaces invested by foreigners, therefore, land revenue was less. In Yangpu, the amount of “staff housing” (the housing for average residents) has increased from 4.9 million square meters in 1985 to 19.2 million in 2000, an increase of 292%. The share of staff housing in Yangpu also increased from 18.1% of that in all urban districts in 1985 to 19.7% in 2000. In the same period of time, the share of staff housing in Huangpu dropped from 7.1% to 3.8%. (Table 5b)

The main reason of more staff housing in Yangpu is its land price. Shanghai has a land price scale of six grades. Most area in Huangpu is in the first grade zone, the remainder and a large part of Luwan are in the second grade zone, and the whole area of Yangpu is in the third grade zone. More affordable housing in Yangpu is the result of the land price difference, but the concentration of affordable housing also contributed to the lower land price in Yangpu.

Although no land leasing revenue data is available at the district level, the land leasing policy does have impacts on land revenue in districts due to their location, which brings about difference in urban development pattern. Districts located at attractive locations generate more revenue so they have more capital for better developments, which in turn making them even more attractive to future developers.

Shift of economic development goal

The shift of Shanghai's development goal from manufacturing to service industry has also brought significant impacts on urban development. While Huangpu and Luwan, the traditional service industry center, have received more attention of the municipal government and foreign investors, Yangpu as the traditional manufacturing district lost much of the investment from both the national and the municipal government. In addition to the disadvantaged location, the economic structure thus makes the district even less attractive to foreign developers.

The shift also causes employment problem. Yangpu as the base of Shanghai's textile industry, shares a large proportion of the 400,000 workers laid-off by the textile industry. The majority is middle age women who have difficulties in finding new jobs, which causes a social as well as an economic problem. The district's lower purchase power becomes another barrier in attracting investment in retail and commercial development.

At the same time, with more moderate and lower income residents moving in from districts where a Chinese version of gentrification has forced population relocation, Yangpu has to bear additional load on community services. Both Huangpu and Luwan have lost population (most are moderate income), but Yangpu experienced a 9.7% population gain from 1985 to 2000, largely because of the construction of affordable housing projects. The huge demands for schools, clinics, and day-cares brought about by the projects have made the district government hard to find resources.

The removal of the equalitarian revenue policy

Finally, the removal of the equalitarian revenue policy practiced in the pre-reform era hurts districts like Yangpu. Shanghai had adopted an equalitarian revenue policy from the 1950s to 1992. Under the planned economy, municipal government collected all revenues from districts then re-distributed to them based on needs. Yangpu, a district that contributed over one quarter of the city's revenue, was the main "donator" in the system. Luwan and other districts with limited manufacturing industry and less revenue, were the main beneficiaries.

After the reforms, a new revenue arrangement called "two levels of government and two systems of financial management" has been put in place. Under the new system, the municipal government will not take all revenues from district, it instead shares both tax revenue and development responsibility with district government. A fixed proportion of tax revenue will go to districts, and district government is responsible for urban development, environmental protection, export, trading, pricing, labor force, personnel, and business administration in the district.

However, districts like Yangpu with more manufacturing factories have become weaker economically today, due to the shift of development strategy and the challenge of imported goods. Should the equalitarian policy still be in place, they would become new beneficiaries. The replacement of the equalitarian tax revenue arrangement thus hurts these districts severely.

All the three policies working together with the national policy shift have contributed to differences in urban development in the three districts.

Conclusion: Interaction of policy and community features

Policies are applied to all districts across a city. The differences in urban development among “brothers” are largely the outcomes of an interaction between policies and community features. Without the policy window open, such as the land management reform and the issue of land leasing policy, development opportunities would not be emerging. Without entrepreneurship, on the other hand, leaders of a district may miss these opportunities. Because leaders of the Luwan district are ambitious and aggressive, they would take the political risk on land leasing at the early years of the reform, and created an innovative way for local revenue. A conservative government in Yangpu has lost some opportunities.

The extent to which a policy may bring about difference relies heavily on community features: the geographic location, the history, the quality of residents and leaders, and the economic base of a district. People in Luwan have a tradition of sensitive to business opportunity, this local culture and the location of the district, make it easier for leaders to build consensus and get support from constituency. Various community features thus themselves interactively react to opportunities brought by new policies. External factors thus interweave with international factors affecting development outcomes.

Since 1998, Yangpu has adopted innovative policies and become more active in urban development under a new district leadership. There also emerges a new opportunity for the district. With most part of the land in Huangpu and Luwan being acquired and developed in recent years, and under the pressure of the central government to control sprawl in rural areas, developers are seeking available land in the city. With many factories moved out or shut down, land in Yangpu becomes attractive. Actually many new buildings were completed in the last five years. Policy may work together with the changed district features to reduce the development gap in the three districts.

Table 1 Economic growth of Shanghai: 1978-2000
(in billion Yuan)

Year	1978	1990	2000
Total GDP	27.3	75.6	455.1
Index	100	220	750

Source: SMSB, 2001

Table 2 Composition of Shanghai's economy:1978-2000
(percentage)

Sector	1978	2000
Primary industry	4.0%	1.8%
Secondary industry	77.4%	47.6%
Tertiary industry	18.6%	50.6%
Total	100%	100%

Source: SMSB, 2001

Table 3 Composition of the tertiary industry in Shanghai:1978-2000
(percentage)

Industry	1978	2000
Transportation, postal, telecommunication	23.7%	13.7%
Whole sale, retail, catering	45.6%	21.1%
Banking, insurance	13.8%	29.7%
Real estate	0.5%	10.9%
Others	16.4%	24.6%
Total	100%	100%

Source: SMSB, 2001

Table 4 Profile of the three urban districts:1985-2000

District	Land (sq. km)		Population		Administrative units***	
	1985*	2000**	1985*	2000**	1985	2000
Huangpu	18.7 (5.3)	12.4(4.3)	683,700(9.8)	661,800(10.5)	NA	9
Luwan	7.5 (2.2)	8.05(2.8)	480,000(6.9)	355,900(5.7)	NA	4
Yangpu	53.0 (15.1)	60.7(21.0)	975,000(14.0)	1,070,000(17.2)	NA	10
Urban area total** (100%)	351.1	289.4	6,983,000	6,282,400	134	99

Source: SMSB, 1986, 2001

Notes:

*Number in parentheses indicates the share of a district in the total of the city's urban districts in 1985. There was also a large rural area in the city's jurisdiction. There were 12 urban districts in 1985, the number increased to 16 in 2000. Most rural areas have been developed and added to the urban area since 1992, the total urban area has increased to 3924.24 square km with a population of 1,136,820 in 2000. "Urban area" of 2000 refers to the central urban district, which is the "older" urban area consisting of 9 of the 16 urban districts. See Map 1 for changes of the urban boundary.

** The 2000 percentage is the share of a district in the total of the city's "central urban district".

***Administrative units are urban sub-district offices ("Street office" as called by the Chinese government), which is government body at the lowest level in an urban area in China.

Table 5a Comparison of urban development in the three districts: 1985 –2000(I)
(million square meter)

District	Total building area		Residential use		Non-residential uses	
	1985	2000	1985	2000	1985	2000
Huangpu	10.65 (9.5)	16.54 (8.1)	5.81(9.0)	7.55(6.2)	4.84(7.7)	8.99(10.9)
Luwan	6.72 (5.3)	10.62(5.2)	3.84(6.0)	5.88(4.9)	2.88(4.6)	4.74(5.7)
Yangpu	19.43 (15.2)	36.12(17.7)	8.62(17.1)	21.35(17.7)	10.80(17.1)	14.78(17.9)
Urban area total* (100%)	127.47	203.49	64.44	120.83	63.04	82.66

Source: SMSB, 1986, 2001

Notes:

* See the notes of Table 4.

Table 5b Comparison of urban development in the three districts: 1985 –2000(II)
Residential building uses
(10,000 square meter)

District	Villa		Apartment		Staff housing		Slum	
	1985	2000	1985	2000	1985	2000	1985	2000
Huangpu	2(1.5)	1(0.6)	3(3.2)	3(1.5)	194(7.1)	367(3.8)	15(5.3)	4(10.8)
Luwan	12(8.8)	16(9.5)	19(20)	30(15.3)	78(2.9)	342(3.5)	5(1.8)	1(2.7)
Yangpu	4(2.9)	3(1.8)	1(1.1)	1(0.5)	494(18.1)	1921(19.7)	44(15.7)	12(32.4)
Urban area total* (100%)	136	168	95	196	2730	9743	281	37

Source: SMSB, 1986, 2001

Notes:

* See the notes of Table 4.

Table 5c Comparison of urban development in the three districts: 1985 –2000(III)
Non-residential building uses
(10,000 square meter)

District	Plant		Office		Shop	
	1985	2000	1985	2000	1985	2000
Huangpu	106(3.0)	110(3.5)	127(29.9)	423(25.5)	56(18.8)	135(18.6)
Luwan	160(4.6)	116(3.7)	20(4.7)	154(9.3)	18(6.0)	71(9.8)
Yangpu	745(21.4)	935(29.8)	25(5.9)	62(3.7)	34(11.4)	62(8.5)
Urban area total* (100%)	3485	3138	425	1657	298	726

Source: SMSB, 1986, 2001

Notes:

• See the notes of Table 4.

Table 6 Changes in urban development in the three districts

District	Huangpu			Luwan			Yangpu		
	1985	2000	Change	1985	2000	Change	1985	2000	Change
Year/Change(%)	1985	2000	Change	1985	2000	Change	1985	2000	Change
Land (sq. km)	18.7	12.4	-33.7%	7.5	8.1	7.3%	53.0	60.7	14.5%
Population	683700	661800	-3.3	480000	355900	-25.9	975000	1070000	9.7
Density (person/sq. km)	36561	53370	46.0	64000	43938	-31.3	18396	17627	-4.2
Total building area(million)	10.65	16.54	55.3	6.72	10.62	58.0	19.43	36.12	85.9
Building area/ per capita (sq.m)	15.57	24.99	60.5	14.0	29.8	112.9	19.93	33.75	69.3
Residential use (million)	5.81	7.55	29.9	3.84	5.88	53.1	8.62	21.35	148.0
Residential use/per capita (sq.m)	8.5	11.4	134.1	8.0	16.5	106.3	8.8	19.95	126.7
Non-residential use(million)	4.84	8.99	85.7	2.88	4.74	64.6	10.82	14.78	36.6
Non-residential/per capita (sq.m)	7.1	13.6	91.5	6.0	13.3	121.7	11.1	13.8	24.3
Villa (million)	2	1	-50.0	12	16	33.3	4	3	-25.0
Apartment (million)	3	3	0	19	30	57.9	1	1	0
Slum (million)	15	4	-73.3	5	1	-80.0	44	12	-72.7
Plant (million)	106	110	3.8	160	116	-27.5	745	935	25.5
Office (million)	127	423	233.1	20	154	670.0	25	62	148.0
Shop (million)	56	135	141.1	18	71	294.4	34	62	82.4

Source: SMSB 1986, 2001

Notes: Land is in square km, building areas are in million square-meter, changes are in percentage.

Table 7 Comparison of district features

District	Huangpu	Luwan	Yangpu
Location	In the CBD	Next to the CBD	Fringe area to the CBD
History	Traditional office and retail center, founded by the British authority under the concession treaty in 1845. Today, most residents work in businesses and government entities. Retaining its importance with the shift of the city's economy from manufacturing to service industry.	Retail/ residential center for the "high class" after the district founded by the French authority in the 1890s. The traditional economic function has been reborn after the reforms. Many residents have direct or indirect experiences with the marketplace due to the history and the local culture. Regaining importance with the shift of the city's economy from manufacturing to service industry.	It was the largest and main industry district in the city for over 80 years before the development of Pu-dong New District. The port area, founded by the British authority in the 1900s, played a key role for industrial development. Losing importance with the shift of the city's economy from manufacturing to service industry.
Economy (measured by land use)	A concentration of headquarters of various businesses, and the retail district was recognized as the "number one shopping street in China".	Various retails, especially famous for its fashion shops. A traditional resident district of good quality. The smallest district in the city in terms of land area.	A traditional industry district, a concentration of textile, steel, and machinery factories, the manufacturing sector was especially strengthened after the 1949 Chinese Revolution, but weakened after the reforms.
Leadership	Many are from district government bodies, well connected with the municipal government that is located in the district. They are familiar with business issues as well as the city bureaucratic system.	Many come from local companies and district government agencies. They are entrepreneurs especially sensitive to all development opportunities.	Many have worked in the manufacturing industry. They are familiar with the manufacturing rather than the service industry. Relatively lower education level since a few rose from workers.