### Online Appendices

# The Allocation of Talent and Financial Development, 1897 to 1936

Chen Lin

The University of Hong Kong

Chicheng Ma

The University of Hong Kong

Yuchen Sun

University of International Business and Economics

Yuchen Xu

The University of New South Wales

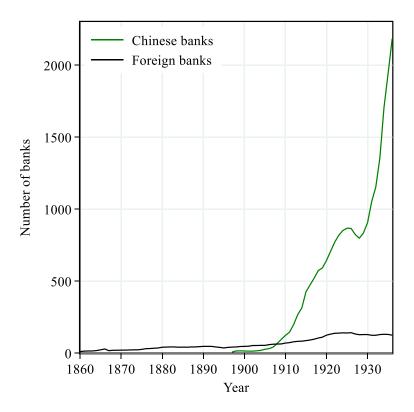


Figure A1. Growth of foreign and Chinese modern banks in China

Notes: The figure shows the divergent development of foreign banks and Chinese-owned modern banks in China by year. Banks include both the head offices and the branches.

#### Table A1. The abolition of the civil examination and modern banking development: Logarithm and inverse hyperbolic sine transformations of the number of banks

The dependent variable is the number of modern Chinese banks (including branches) in each prefecture in each year from 1897 to 1936. The controls include log population in 1880, log distance to the coast, and log prefectural land area. Standard errors are clustered at the prefecture level and are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at 10%, 5% and 1%, respectively.

	Ln (1+ Number of Chinese banks)		Number of Chinese banks (inverse hyperbolic sine)	
	1	2	3	4
Civil examination quota (log) × Post	0.338***	0.227***	0.422***	0.282***
	(0.036)	(0.049)	(0.044)	(0.061)
$Controls \times Post$		Yes		Yes
Year FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
R-squared	0.703	0.710	0.701	0.708
Observations	11,240	11,240	11,240	11,240

#### Table A2. Alternative measures of banking development

Growth of modern Chinese banks (column 1) is the annual increase in the number of modern Chinese banks in each prefecture. Number of Chinese banks (presence) in column 2 is the number of banks regardless of the number of each bank's branches. Number of Chinese bank headquarters in column 3 is the number of Chinese bank headquarters in each prefecture in each year. Number of Chinese bank branches in column 4 is the number of Chinese banks branches in each prefecture in each year. Controls are the same as those of Table 2. The sample period is from 1897 to 1936. Standard errors are clustered at the prefecture level and are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at 10%, 5% and 1%, respectively.

	Growth of Chinese banks	Number of Chinese banks (presence)	Number of Chinese bank headquarters	Number of Chinese bank branches
	1	2	3	4
Civil examination quota (log) × Post	0.163*** (0.057)	1.102*** (0.421)	0.490** (0.233)	1.178*** (0.438)
$Controls \times Post$	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Prefecture FE	Yes	Yes	Yes	Yes
R-squared	0.186	0.589	0.520	0.479
Observations	11,240	11,240	11,240	11,240

#### Table A3. The abolition of the civil examination and modern banking development: County-level evidence

We replicate Table 2 (column 4) and Table A2 using the county-level civil examination quota and variables on banks. Controls include log population in 1880 (still at the prefecture level), log distance to the coast, and log county land area. Columns 2 to 6 additionally control for prefecture-specific year fixed-effects in order to rule out the prefectural effect on banking development over time. Standard errors are clustered at the county level and are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at 10%, 5% and 1%, respectively.

	Number of Chinese banks	Number of Chinese banks	Growth of Chinese banks	Number of Chinese banks (presence)	Number of Chinese bank headquarters	Number of Chinese bank branches
	1	2	3	4	5	6
Civil examination quota $(log) \times Post$	1.272** (0.492)	2.060** (0.873)	0.167** (0.069)	1.489** (0.580)	0.632** (0.318)	1.427** (0.565)
$Controls \times Post$	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Prefecture × Year FE		Yes	Yes	Yes	Yes	Yes
R-Squared	0.490	0.484	0.153	0.554	0.488	0.456
Observations	57,000	55,720	55,720	55,720	55,720	55,720

## Table A4. The abolition of the civil examination and modern banking development: The logarithm measure of industrial firms

This table replicates Table 4 but uses the natural logarithm (plus 1) of the number of industrial firms in the control variables. Standard errors are clustered at the prefecture level and are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at 10%, 5% and 1%, respectively.

	Number of Chinese banks	
	1	2
Civil examination quota (log) × Post	1.435***	1.309***
1 ( )	(0.498)	(0.499)
Industrial firms (log)	4.546*	4.347*
-	(2.422)	(2.437)
Telegraph		0.573***
		(0.219)
Treaty ports		4.278***
		(1.138)
$Controls \times Post$	Yes	Yes
Year FE	Yes	Yes
Prefecture FE	Yes	Yes
R-squared	0.533	0.543
Observations	11,240	11,240

#### Table A5. Evidence on talent reallocation: Controlling for industrial-major students

This Table replicates Table 6 (column 1) but additionally controlling for the share of industrial students in all vocational school students. Robust standard errors are reported in parentheses. \*, \*\*, and \*\*\* indicate significance at 10%, 5% and 1%, respectively.

	Percentage of students majoring in business in 1919	Percentage of students majoring in business in 1934
	1	2
Civil examination quota (log)	7.912***	5.259***
• • •	(2.111)	(1.572)
Percentage of students majoring in industrial subjects	-0.078	-0.021
	(0.063)	(0.026)
Controls	Yes	Yes
R-squared	0.090	0.063
Observations	281	281

#### Table A6. Debt Ratio (%) by Industrial Sectors in China

This table ranks the average debt to asset ratio by industrial sectors in China. Data of the first column are obtained from a survey of 121 firms across 12 industries conducted by the Statistics Division of the Ministry of Economic Affairs, Republic of China, in 1940 and 1941 (Chen and Yao, 1961). The second column is based on the financial reports of 23 firms in six industries from 1920 to 1940. The sources are Institute of Economics, Chinese Academy of Social Sciences (2018); Institute of Economics, Shanghai Academy of Social Sciences (1981); and Zhao (2010).

Industry	121 firms in 1940 and 1941	23 firms in 1920-1940
Textile	76.50	50.13
Machine building	68.48	37.78
Timber and construction	67.82	41.74
Food and beverage	60.47	28.87
Water and electricity	54.37	21.02
Electrical equipment	51.59	
Culture related (printing, etc.)	50.98	21.02
Smelting	47.42	
Chemistry	47.19	
Soil/stone related (brick kiln, porcelain, etc.)	39.27	
Metal manufacturing	30.82	