

[NOT FOR PUBLICATION]

Online Appendix for

“Policy and Misallocation: Evidence from Chinese Firm-Level Data”

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Part A of this Online Appendix contains additional information on the 10th Five-Year Plan, including a list of supported industries. Part B contains the additional robustness checks discussed in the main text. Part C contains additional figures. Note, as in the main text, we use the terms firm and establishment interchangeably; the raw data is at the establishment level.

A. Five-Year Plans

The Five-Year Plans are the most important industrial policies used to guide investment and economic activities in China. The Chinese central government issued the first Five-Year Plan in 1953, which sought to promote different industries by making specific investment plans and establishing growth objectives for each industry. The Five-Year Plans are proposed and approved by the State Council, which is the central Chinese government. However, given that the number of firms owned by the central government is small relative to the total number of firms in the economy, direct support to particular firms by this governing body is limited.

Local governments at the provincial, county, and district levels are key to implementing the Five-Year Plans. Therefore, the central government urges local governments to support the targeted industries. Local governments are asked to make regional development plans based on the Five-Year Plan. The central government conducts mid-term and final examinations, and the results of these examination are used as one of the promotion indicators for local officers. Therefore, local governments have a clear incentive to support the industries using various methods such as fiscal and financial supports, tax reduction, selling products for firms, helping firms establish branches, etc.

There is no direct evidence on why particular industries are supported, and the original official documents only give abstract reasons. The main theme for the development of manufacturing industries in the 10th Five-Year Plan is to improve technology by adopting the new advances of the technology revolution, and to transform the economic structure. The Five-Year Plan still supports some industries dealing with raw materials, including textile, paper and paper products manufacturing. Local governments were asked to help firms in these raw material industries to produce using less energy and less pollution by adopting new technology. Similarly, equipment manufacturing is supported by the Five-Year Plan to encourage the adoption of production standards used by foreign competitors. For some industries, like satellite manufacturing, China already employed advanced technology, but the plan still supports it. Finally, some industries, including steel and energy production, have been supported in every Five Year presumably because they are important for economic development and national defense.

List of Industries Supported and Not Supported by the Five-Year Plans

4-digit code	Industry	By the 9 th FYP	By the 10 th FYP	< 10 in a single year	V(TFPR) increase
Supported Group					
1310	Grain milling	No	Yes	No	No
1320	Feed processing	No	Yes	No	Yes
1331	Edible vegetable oil processing	No	Yes	No	Yes
1332	Non-edible vegetable oil processing	No	Yes	No	No
1340	Sugar refining	No	Yes	No	Yes
1370	Other unlisted agricultural and sideline food processing	No	Yes	No	Yes
1391	Starch and starch products manufacturing	No	Yes	No	Yes
1392	Bean products manufacturing	No	Yes	No	No
1393	Egg processing	No	Yes	No	Yes
1711	Cotton, chemical fiber textile processing	No	Yes	No	Yes
1712	Cotton, chemical fiber printing and dyeing finishing	No	Yes	No	No
1721	Top processing	No	Yes	No	Yes
1722	Wool textile	No	Yes	No	Yes
1723	Wool dyeing and finishing	No	Yes	No	No
1730	Hemp textile	No	Yes	No	No
1741	Reeling processing	No	Yes	No	Yes
1742	Silk spinning and silk processing	No	Yes	No	Yes
1743	Silk screen dyeing finishing	No	Yes	No	Yes
1751	Cotton and chemical fiber products manufacturing	No	Yes	No	Yes
1752	Wool products manufacturing	No	Yes	No	No
1753	Hemp products manufacturing	No	Yes	No	No
1754	Silk products manufacturing	No	Yes	No	Yes
1755	Rope and cable manufacturing	No	Yes	No	Yes
1756	Woven and cord fabric manufacturing	No	Yes	No	No
1757	Nonwovens manufacturing	No	Yes	No	Yes
1761	Cotton, chemical fiber knitwear and fabricated products manufacturing	No	Yes	No	Yes
1762	Wool knitwear and fabricated products manufacturing	No	Yes	No	Yes
1763	Silk knitwear and fabricated products manufacturing	No	Yes	No	Yes
1769	Other knitwear and fabricated products manufacturing	No	Yes	No	Yes
1810	Textile and garment manufacturing	No	Yes	No	Yes
1910	Leather tanning processing	No	Yes	No	No
1931	Fur tanning processing	No	Yes	No	No
2210	Pulp manufacturing	No	Yes	No	Yes
2221	Mechanism paper and paperboard manufacturing	No	Yes	No	Yes
2223	Processed paper manufacturing	No	Yes	No	Yes
2231	Other paper products manufacturing	No	Yes	No	Yes
2422	Sports equipment and accessories manufacturing	No	Yes	No	Yes
2621	Nitrogen fertilizer manufacturing	No	Yes	No	Yes
2622	Phosphate fertilizer manufacturing	No	Yes	No	No
2623	Potash fertilizer manufacturing	No	Yes	No	No
2624	Compound fertilizer manufacturing	No	Yes	No	Yes
2625	Other fertilizer manufacturing	No	Yes	No	Yes
2710	Chemical original drug manufacturing	No	Yes	No	Yes
2720	Chemical preparations manufacturing	No	Yes	No	Yes
2730	Chinese medicine Pieces processing	No	Yes	No	Yes
2750	Veterinary drugs manufacturing	No	Yes	No	Yes
2760	Biological and biochemical products manufacturing	No	Yes	No	Yes
2770	Health materials and medical supplies manufacturing	No	Yes	No	Yes
2811	Chemical pulp manufacturing	No	Yes	No	Yes
2812	Man-made fiber manufacturing	No	Yes	No	Yes
2911	Vehicles, aircraft and machinery tires manufacturing	No	Yes	No	No
2912	Power tire manufacturing	No	Yes	No	Yes
2913	Tire refurbishment	No	Yes	No	Yes
2920	Rubber sheet, tube, and belt manufacturing	No	Yes	No	No
2930	Rubber parts manufacturing	No	Yes	No	Yes
2940	Recycled rubber manufacturing	No	Yes	No	No
2950	Daily and medical rubber products manufacturing	No	Yes	No	Yes
2960	Rubber boots manufacturing	No	Yes	No	No
2990	Other rubber products manufacturing	No	Yes	No	No
3010	Plastic film manufacturing	No	Yes	No	No
3020	Plastic plate, tube, and profile manufacturing	No	Yes	No	Yes
3030	Plastic wire, rope and knitwear manufacturing	No	Yes	No	Yes
3040	Foam manufacturing	No	Yes	No	No
3060	Plastic crates and containers manufacturing	No	Yes	No	Yes
3070	Plastic parts manufacturing	No	Yes	No	Yes
3081	Plastic shoes manufacturing	No	Yes	No	No
3082	Daily plastic sundry goods manufacturing	No	Yes	No	No
3090	Other plastic products manufacturing	No	Yes	No	Yes
3111	Cement manufacturing	No	Yes	No	Yes
3513	Turbine and auxiliary equipment manufacturing	No	Yes	No	Yes
3615	Metallurgical equipment manufacturing	No	Yes	No	No
3641	Pulp and paper special equipment manufacturing	No	Yes	No	No
3651	Other clothing processing special equipment manufacturing	No	Yes	No	No
3653	Sewing machine manufacturing	No	Yes	No	No

3671	Tractor manufacturing	No	Yes	No	Yes
3672	Mechanized agricultural and gardening equipment manufacturing	No	Yes	No	Yes
3674	Animal husbandry machinery manufacturing	No	Yes	No	Yes
3675	Fishery machinery manufacturing	No	Yes	No	No
3676	Agricultural machinery accessories manufacturing	No	Yes	No	Yes
3679	Other agricultural machinery manufacturing	No	Yes	No	Yes
3711	Railway rolling stock and EMU manufacturing	No	Yes	No	Yes
3712	Special rail vehicles manufacturing	No	Yes	No	Yes
3713	Railway rolling stock accessories manufacturing	No	Yes	No	Yes
3714	Railway special equipment and accessories manufacturing	No	Yes	No	Yes
3719	Other railway equipment manufacturing and equipment repair	No	Yes	No	Yes
3751	Metal ship manufacturing	No	Yes	No	Yes
3752	Manufacturing of other products for production	No	Yes	No	Yes
3754	Marine equipment manufacturing	No	Yes	No	Yes
3759	Ship repair and shipbreaking	No	Yes	No	Yes
3761	Aircraft manufacturing and repair	No	Yes	No	Yes
4071	Home video equipment manufacturing	No	Yes	No	Yes
4072	Home audio equipment manufacturing	No	Yes	No	Yes
4090	Other electronic equipment manufacturing	No	Yes	No	No

Not Supported Group

1351	Livestock and poultry slaughtering	No	No	No	No
1352	Meat products and by-product processing	No	No	No	Yes
1361	Frozen processing of aquatic products	No	No	No	Yes
1362	Surimi products and dry pickling processing of aquatic products	No	No	No	Yes
1363	Aquatic feed manufacturing	No	No	No	Yes
1364	Fish oil extraction and product	No	No	No	No
1411	Pastry and bread making	No	No	No	Yes
1419	Biscuits and other baked goods manufacturing	No	No	No	Yes
1421	Candy, chocolate making	No	No	No	No
1422	Candied production making	No	No	No	No
1431	Rice and flour products manufacturing	No	No	No	No
1432	Frozen food manufacturing	No	No	No	No
1440	Liquid milk and dairy products manufacturing	No	No	No	Yes
1451	Meat and poultry canning	No	No	No	No
1452	Aquatic product canning	No	No	No	Yes
1453	Vegetable and fruit canning	No	No	No	Yes
1459	Other foods canning	No	No	No	No
1461	MSG manufacturing	No	No	No	Yes
1462	Soy sauce, vinegar and similar products manufacturing	No	No	No	Yes
1469	Other condiments, fermented products manufacturing	No	No	No	No
1492	Frozen drinks and edible ice manufacturing	No	No	No	Yes
1493	Salt processing	No	No	No	No
1494	Food and feed additive manufacturing	No	No	No	No
1499	Other unspecified food manufacturing	No	No	No	Yes
1510	Alcohol manufacturing	No	No	No	Yes
1521	Liquor manufacturing	No	No	No	Yes
1522	Beer manufacturing	No	No	No	Yes
1523	Yellow wine manufacturing	No	No	No	Yes
1524	Wine making	No	No	No	Yes
1529	Other wine making	No	No	No	Yes
1531	Carbonated beverage manufacturing	No	No	No	Yes
1532	Bottle (can) drinking water manufacturing	No	No	No	No
1533	Fruit and vegetable juice and fruit and vegetable juice beverage manufacturing	No	No	No	No
1535	Solid beverage manufacturing	No	No	No	No
1540	Tea beverages and other soft drink manufacturing	No	No	No	No
1610	Tobacco leaf re-baking	No	No	No	No
1620	Cigarette manufacturing	No	No	No	Yes
1690	Other tobacco products processing	No	No	No	Yes
1820	Textile shoes manufacturing	No	No	No	No
1830	Cap manufacturing	No	No	No	Yes
1921	Leather shoes manufacturing	No	No	No	No
1922	Leather garment manufacturing	No	No	No	No
1923	Luggage, bag manufacturing	No	No	No	Yes
1924	Other leather products manufacturing	No	No	No	No
1932	Fur garment processing	No	No	No	Yes
1939	Other fur products processing	No	No	No	No
1941	Feather (velvet) processing	No	No	No	Yes
1942	Feather (velvet) products processing	No	No	No	Yes
2011	Sawn processing	No	No	No	Yes
2012	Wood chip processing	No	No	No	No
2021	Plywood manufacturing	No	No	No	No
2022	Fiberboard manufacturing	No	No	No	Yes
2023	Particleboard manufacturing	No	No	No	Yes
2029	Other wood-based panels and materials manufacturing	No	No	No	No
2040	Bamboo, rattan, palm and grass products manufacturing	No	No	No	No
2110	Wooden furniture manufacturing	No	No	No	Yes
2120	Bamboo and rattan furniture manufacturing	No	No	No	Yes
2130	Metal furniture manufacturing	No	No	No	No

2190	Other furniture manufacturing	No	No	No	Yes
2311	Book, newspaper, publication	No	No	No	Yes
2312	Booklet printing	No	No	No	Yes
2319	Packaging and other printing	No	No	No	No
2320	Binding and other printing service activities	No	No	No	Yes
2330	Copy of recording medium	No	No	No	Yes
2411	Stationery manufacturing	No	No	No	No
2412	Pen manufacturing	No	No	No	No
2413	Teaching model and teaching aid manufacturing	No	No	No	Yes
2419	Other stationery manufacturing	No	No	No	No
2421	Ball manufacturing	No	No	No	Yes
2423	Other sporting goods manufacturing	No	No	No	Yes
2431	Chinese musical instrument manufacturing	No	No	No	Yes
2432	Western musical instrument manufacturing	No	No	No	Yes
2433	Electronic musical instrument manufacturing	No	No	No	Yes
2439	Other instruments and parts manufacturing	No	No	No	Yes
2440	Toy manufacturing	No	No	No	Yes
2451	Open-air playground amusement equipment manufacturing	No	No	No	No
2452	Entertainment and indoor amusement equipment manufacturing	No	No	No	No
2611	Inorganic acid manufacturing	No	No	No	No
2612	Inorganic alkali manufacturing	No	No	No	No
2613	Inorganic salt manufacturing	No	No	No	No
2614	Organic chemical raw material manufacturing	No	No	No	Yes
3112	Lime and gypsum manufacturing	No	No	No	Yes
3121	Cement product manufacturing	No	No	No	Yes
3122	Structural component manufacturing	No	No	No	Yes
3123	Asbestos cement products manufacturing	No	No	No	Yes
3124	Lightweight building materials manufacturing	No	No	No	No
3129	Other cement products manufacturing	No	No	No	No
3131	Clay brick and building block manufacturing	No	No	No	Yes
3132	Sanitary ceramics manufacturing	No	No	No	Yes
3133	Construction stone processing	No	No	No	No
3134	Waterproof building materials manufacturing	No	No	No	No
3135	Insulation and sound insulation materials manufacturing	No	No	No	Yes
3139	Other building materials manufacturing	No	No	No	Yes
3141	Flat glass manufacturing	No	No	No	Yes
3142	Technical glass manufacturing	No	No	No	No
3143	Optical glass manufacturing	No	No	No	No
3144	Glass instrument manufacturing	No	No	No	Yes
3145	Daily glass products and glass packaging containers manufacturing	No	No	No	Yes
3146	Glass insulation container manufacturing	No	No	No	Yes
3147	Glass fiber and related product manufacturing	No	No	No	No
3148	Glass fiber reinforced plastic products manufacturing	No	No	No	Yes
3149	Other glass products manufacturing	No	No	No	No
3152	Special ceramics manufacturing	No	No	No	No
3153	Daily ceramics manufacturing	No	No	No	No
3159	Gardening, furnishings and other ceramic products manufacturing	No	No	No	No
3161	Asbestos manufacturing	No	No	No	No
3162	Mica product manufacturing	No	No	No	Yes
3169	Refractory ceramics and other refractory materials manufacturing	No	No	No	Yes
3191	Graphite and carbon products manufacturing	No	No	No	No
3199	Other non-metallic mineral products manufacturing	No	No	No	Yes
3240	Ferroalloy smelting	No	No	No	Yes
3411	Metal structure manufacturing	No	No	No	No
3412	Metal door and window manufacturing	No	No	No	No
3421	Cutting tool manufacturing	No	No	No	Yes
3422	Hand tool manufacturing	No	No	No	No
3423	Metal tools for agricultural and garden use manufacturing	No	No	No	Yes
3424	Knives and scissors and similar daily metal tools manufacturing	No	No	No	No
3429	Other metal tool manufacturing	No	No	No	No
3431	Container manufacturing	No	No	No	Yes
3432	Metal pressure vessel manufacturing	No	No	No	Yes
3440	Wire rope and its products manufacturing	No	No	No	Yes
3451	Manufacture of metal parts for construction and furniture	No	No	No	No
3452	Building decoration and plumbing pipe parts manufacturing	No	No	No	Yes
3453	Safety and fire metal products manufacturing	No	No	No	Yes
3459	Other construction and safety metal products manufacturing	No	No	No	Yes
3460	Metal surface treatment and heat treatment processing	No	No	No	No
3471	Manufacture of enamel products for industrial production	No	No	No	Yes
3481	Metal kitchen conditioning and sanitary appliance manufacturing	No	No	No	No
3489	Other unspecified metal products manufacturing	No	No	No	Yes
3511	Boiler and auxiliary equipment manufacturing	No	No	No	Yes
3512	Internal combustion engine and accessories manufacturing	No	No	No	No
3514	Turbine and auxiliary machinery manufacturing	No	No	No	Yes
3519	Other prime mover manufacturing	No	No	No	Yes
3530	Lifting transport equipment manufacturing	No	No	No	No
3551	Bearing manufacturing	No	No	No	Yes
3552	Gear, transmission and drive component manufacturing	No	No	No	No
3560	Oven, furnace and electric furnace manufacturing	No	No	No	No
3571	Fan manufacturing	No	No	No	Yes

3573	Refrigeration and air conditioning equipment manufacturing	No	No	No	Yes
3574	Pneumatic and power tool manufacturing	No	No	No	No
3575	Other general equipment manufacturing	No	No	No	No
3577	Weighing instrument manufacturing	No	No	No	No
3582	Fasteners, spring manufacturing	No	No	No	No
3583	Mechanical parts processing and equipment repair	No	No	No	No
3589	Other general parts manufacturing	No	No	No	Yes
3591	Steel casting manufacturing	No	No	No	No
3592	Forgings and powder metallurgy products manufacturing	No	No	No	No
3611	Mining and quarrying equipment manufacturing	No	No	No	No
3612	Oil drilling and mining equipment manufacturing	No	No	No	No
3613	Construction machinery manufacturing	No	No	No	Yes
3622	Rubber processing equipment manufacturing	No	No	No	No
3623	Plastic processing equipment manufacturing	No	No	No	No
3624	Wood processing machinery manufacturing	No	No	No	No
3625	Mold making	No	No	No	No
3631	Special equipment manufacturing for food, beverage and tobacco industry	No	No	No	No
3632	Manufacturing of special equipment for agricultural and sideline food processing	No	No	No	Yes
3633	Special equipment manufacturing for feed production	No	No	No	Yes
3642	Printing equipment manufacturing	No	No	No	No
3643	Daily use chemical equipment manufacturing	No	No	No	No
3644	Pharmaceutical special equipment manufacturing	No	No	No	No
3645	Special equipment for lighting equipment production manufacturing	No	No	No	No
3646	Manufacture of special equipment for the production of glass, ceramics and enamel products	No	No	No	Yes
3649	Manufacture of special equipment for the production of other daily necessities	No	No	No	No
3661	Electrical machinery special equipment manufacturing	No	No	No	No
3669	Aviation, aerospace and other specialized equipment manufacturing	No	No	No	No
3681	Medical diagnostic, monitoring and treatment equipment manufacturing	No	No	No	Yes
3684	Medical, surgical and veterinary equipment manufacturing	No	No	No	No
3686	Prosthetics, artificial organs and implants manufacturing	No	No	No	Yes
3689	Other medical equipment manufacturing	No	No	No	No
3691	Special equipment for environmental pollution prevention and control	No	No	No	Yes
3692	Geological exploration special equipment manufacturing	No	No	No	No
3694	Manufacturing of special equipment for business, catering and service industries	No	No	No	No
3695	Social public safety related equipment manufacturing	No	No	No	Yes
3697	Water resources special machinery manufacturing	No	No	No	No
3731	Motorcycle manufacturing	No	No	No	Yes
3732	Motorcycle parts and accessories manufacturing	No	No	No	Yes
3741	Movable bicycle manufacturing	No	No	No	Yes
3792	Metal signage and facility for traffic management manufacturing	No	No	No	Yes
3799	Other transportation equipment manufacturing	No	No	No	Yes
3951	Household refrigeration electric appliance manufacturing	No	No	No	No
3952	Household air conditioner manufacturing	No	No	No	Yes
3953	Household ventilation electrical appliance manufacturing	No	No	No	Yes
3954	Household kitchen appliances manufacturing	No	No	No	Yes
3955	Household cleaning and sanitary appliance manufacturing	No	No	No	No
3956	Other household electrical appliance manufacturing	No	No	No	No
3961	Manufacture of gas, solar and similar energy appliances	No	No	No	Yes
3969	Other non-power household appliances manufacturing	No	No	No	No
3971	Electric light source manufacturing	No	No	No	No
3972	Lighting fixture manufacturing	No	No	No	No
3979	Lamp electrical accessories and other lighting equipment manufacturing	No	No	No	No
3991	Vehicle-specific lighting and electrical signal equipment manufacturing	No	No	No	Yes
4031	Radio and television program production and launch equipment manufacturing	No	No	No	No
4153	Camera and equipment manufacturing	No	No	No	No
4154	Copy and offset printing equipment manufacturing	No	No	No	Yes
4155	Calculator and currency equipment manufacturing	No	No	No	No
4159	Other cultural and office machinery manufacturing	No	No	No	No
4190	Other instruments manufacturing and repairs	No	No	No	Yes
4211	Sculpture crafts manufacturing	No	No	No	Yes
4212	Metal crafts manufacturing	No	No	No	Yes
4213	Lacquer crafts manufacturing	No	No	No	No
4214	Flower painting crafts manufacturing	No	No	No	No
4215	Natural plant weaving crafts manufacturing	No	No	No	Yes
4216	Drawn work embroidery crafts manufacturing	No	No	No	Yes
4217	Carpet and tapestries manufacturing	No	No	No	Yes
4218	Jewelry and related items manufacturing	No	No	No	No
4219	Other arts and crafts manufacturing	No	No	No	Yes
4221	Mirror and similar products processing	No	No	No	Yes
4222	Bristles, brushes and cleaning tools manufacturing	No	No	No	Yes
4229	Other unspecified manufacturing	No	No	No	No

<u>Dropped - Less than 10 Observations</u>					
2222	Handmade paper manufacturing	No	Yes	Yes	Yes
3762	Spacecraft manufacturing	No	Yes	Yes	Yes
2664	Explosives and pyrotechnic products manufacturing	Yes	Yes	Yes	Yes
2824	Vynolon fiber manufacturing	Yes	Yes	Yes	No
3331	Other rare earth metal smelting	Yes	Yes	Yes	No
3723	Tram manufacturing	Yes	Yes	Yes	Yes
4124	Special instrumentation for agriculture manufacturing	Yes	Yes	Yes	Yes
4127	Nuclear and nuclear radiation measuring instruments manufacturing	Yes	Yes	Yes	Yes
2512	Artificial crude oil manufacturing	Yes	No	Yes	Yes
3315	Antimony smelting	Yes	No	Yes	No
3317	Magnesium smelting	Yes	No	Yes	No
3319	Other commonly used non-ferrous metal smelting	Yes	No	Yes	No
4019	Other communication equipment manufacturing	Yes	No	Yes	Yes
4020	Radar and ancillary equipment manufacturing	Yes	No	Yes	Yes
4310	Metal and non-metallic scrap and debris manufacturing	Yes	No	Yes	Yes
1491	Nutrition and health food manufacturing	No	No	Yes	Yes
1534	Milk beverage and vegetable protein beverage manufacturing	No	No	Yes	Yes
2031	Construction timber and wood component processing	No	No	Yes	No
2140	Plastic furniture manufacturing	No	No	Yes	Yes
2530	Nuclear fuel processing	No	No	Yes	Yes
3321	Gold smelting	No	No	Yes	Yes
3322	Silver smelting	No	No	Yes	Yes
3329	Other precious metal smelting	No	No	Yes	No
3352	Precious metal calendaring	No	No	Yes	No
3663	Weapons and ammunition manufacturing	No	No	Yes	Yes
3693	Special postal machinery and equipment manufacturing	No	No	Yes	Yes
3791	Diving and underwater salvage equipment manufacturing	No	No	Yes	Yes
4039	Application of television equipment and other radio and television equipment manufacturing	No	No	Yes	No
4151	Film machinery manufacturing	No	No	Yes	No
4152	Slide and projection equipment manufacturing	No	No	Yes	No

<u>Dropped - Supported by the 9th Five-Year Plan</u>					
2631	Chemical pesticide manufacturing	Yes	Yes	No	Yes
2641	Paint manufacturing	Yes	Yes	No	Yes
2642	Ink and ink similar products manufacturing	Yes	Yes	No	Yes
2643	Pigment manufacturing	Yes	Yes	No	Yes
2644	Dye manufacturing	Yes	Yes	No	Yes
2645	Seal packing and similar products manufacturing	Yes	Yes	No	Yes
2651	Primary form of plastic and synthetic resin manufacturing	Yes	Yes	No	Yes
2652	Synthetic rubber manufacturing	Yes	Yes	No	No
2653	Synthetic fiber monomer (polymer) manufacturing	Yes	Yes	No	No
2659	Other synthetic materials manufacturing	Yes	Yes	No	No
2661	Chemical reagents and additives manufacturing	Yes	Yes	No	Yes
2662	Special chemical products manufacturing	Yes	Yes	No	No
2665	Information chemical manufacturing	Yes	Yes	No	No
2667	Animal glue manufacturing	Yes	Yes	No	Yes
2671	Soap and synthetic detergent manufacturing	Yes	Yes	No	Yes
2672	Cosmetics manufacturing	Yes	Yes	No	Yes
2673	Oral cleaning supplies manufacturing	Yes	Yes	No	Yes
2674	Spices and fragrance manufacturing	Yes	Yes	No	Yes
2679	Other daily chemical products manufacturing	Yes	Yes	No	No
2821	Nylon fiber manufacturing	Yes	Yes	No	No
2822	Polyester fiber manufacturing	Yes	Yes	No	No
2823	Acrylic fiber manufacturing	Yes	Yes	No	No
2829	Other synthetic fibers manufacturing	Yes	Yes	No	No
3210	Ironmaking	Yes	Yes	No	No
3220	Steelmaking	Yes	Yes	No	Yes
3230	Steel calendaring	Yes	Yes	No	Yes
3316	Aluminum smelting	Yes	Yes	No	Yes
3521	Metal cutting machine tools manufacturing	Yes	Yes	No	No
3522	Metal forming machine manufacturing	Yes	Yes	No	No
3523	Casting machinery manufacturing	Yes	Yes	No	Yes
3524	Metal cutting and welding equipment manufacturing	Yes	Yes	No	No
3525	Machine tool accessories manufacturing	Yes	Yes	No	No
3529	Other metal processing machinery manufacturing	Yes	Yes	No	Yes
3621	Refining, chemical production equipment manufacturing	Yes	Yes	No	No
3721	Automobile vehicle manufacturing	Yes	Yes	No	No
3722	Car modification	Yes	Yes	No	Yes
3724	Car body and trailer manufacturing	Yes	Yes	No	No
3725	Auto parts and accessories manufacturing	Yes	Yes	No	Yes
3726	Car repair	Yes	Yes	No	No
3911	Generators and generator sets manufacturing	Yes	Yes	No	No
3912	Motor manufacturing	Yes	Yes	No	Yes
3919	Micro motor and other motor manufacturing	Yes	Yes	No	Yes
3921	Transformers, rectifiers and inductors manufacturing	Yes	Yes	No	No
3922	Capacitors and ancillary equipment manufacturing	Yes	Yes	No	No
3923	Distribution switch control equipment manufacturing	Yes	Yes	No	No

3924	Power electronic components manufacturing	Yes	Yes	No	Yes
3929	Other transmission and control equipment manufacturing	Yes	Yes	No	Yes
3931	Wire and cable equipment manufacturing	Yes	Yes	No	No
3933	Insulating products manufacturing	Yes	Yes	No	No
3939	Other electrical equipment manufacturing	Yes	Yes	No	No
3940	Battery manufacturing	Yes	Yes	No	No
4041	Electronic computer manufacturing	Yes	Yes	No	Yes
4042	External equipment for electronic computer manufacturing	Yes	Yes	No	Yes
4051	Electronic vacuum devices manufacturing	Yes	Yes	No	No
4052	Optoelectronic and other electronic devices manufacturing	Yes	Yes	No	Yes
4053	Integrated circuit manufacturing	Yes	Yes	No	Yes
4061	Electronic components manufacturing	Yes	Yes	No	No
4111	Industrial automatic control system manufacturing	Yes	Yes	No	Yes
4112	Electrical instrumentation manufacturing	Yes	Yes	No	No
4113	Drawing, calculation and measurement equipment manufacturing	Yes	Yes	No	No
4114	Experimental analysis equipment manufacturing	Yes	Yes	No	No
4115	Testing machine manufacturing	Yes	Yes	No	Yes
4119	Instruments and other general equipment manufacturing	Yes	Yes	No	No
4121	Special instrument for environmental monitoring manufacturing	Yes	Yes	No	Yes
4122	Counting instrument for car and others manufacturing	Yes	Yes	No	Yes
4123	Navigation, meteorological and marine special equipment manufacturing	Yes	Yes	No	Yes
4125	Geological exploration and seismic equipment manufacturing	Yes	Yes	No	Yes
4126	Teaching special equipment manufacturing	Yes	Yes	No	Yes
4128	Electronic measuring instruments manufacturing	Yes	Yes	No	No
4129	Other special equipment manufacturing	Yes	Yes	No	Yes
4130	Watches and clock equipment manufacturing	Yes	Yes	No	Yes
4141	Optical instruments manufacturing	Yes	Yes	No	No
4142	Glasses manufacturing	Yes	Yes	No	No
2511	Crude oil processing and petroleum products manufacturing	Yes	No	No	Yes
2520	Coking	Yes	No	No	No
2619	Other basic chemical raw material manufacturing	Yes	No	No	Yes
3311	Copper smelting	Yes	No	No	Yes
3312	Lead and zinc smelting	Yes	No	No	No
3313	Nickel and cobalt smelting	Yes	No	No	No
3314	Tin smelting	Yes	No	No	Yes
3340	Non-ferrous metal alloy manufacturing	Yes	No	No	No
3351	Common non-ferrous metal rolling processing	Yes	No	No	Yes
3541	Pump and vacuum equipment manufacturing	Yes	No	No	Yes
3542	Gas compression machinery manufacturing	Yes	No	No	No
3543	Valves and cocks manufacturing	Yes	No	No	Yes
3544	Hydraulic and pneumatic power machinery and component manufacturing	Yes	No	No	Yes
3576	Packing equipment manufacturing	Yes	No	No	Yes
3581	Metal seal manufacturing	Yes	No	No	Yes
3614	Other non-metal processing equipment manufacturing	Yes	No	No	Yes
3662	Special equipment for electronics manufacturing	Yes	No	No	No
4011	Communication transmission equipment manufacturing	Yes	No	No	Yes
4012	Communication switching equipment manufacturing	Yes	No	No	Yes
4013	Communication terminal equipment manufacturing	Yes	No	No	No

Note: There are 425 industries in total.

B. Additional Tables

Table A1: Average TFPR for Firms Entering and Exiting the Survey

		New entry	Exit	Overall	Percentage of new firms	Percentage of exit firms
1998-2000	Supported	1.7949	1.6237	1.6119	2.55	16.40
1998-2000	Not supported	1.7237	1.6022	1.5850	2.43	17.71
2001-2005	Supported	1.8665	1.7520	1.7451	3.69	12.13
2001-2005	Not supported	1.7614	1.6818	1.6814	3.56	13.39

Notes: If a firm was newly established during the current survey year, it is included in the new entry group. If a firm appears in the current year (except 2005, the last year of the sample) but not the following year, it is classified as an exiting firm. The exit group is roughly defined, because we have no information whether a firm exited from the industry or exited from only the survey due to lower nominal revenue.

Table A2: Summary Statistics of Industries with Balanced Firms

	Supported	Not Supported
V[log(TFPR)]	0.3034 (0.2218)	0.3263 (0.2418)
M[log(TFPR)]	1.5384 (0.3156)	1.6064 (0.3325)
M[log(TFPQ)]	6.0935 (0.4480)	6.0968 (0.5418)
M[log(MRPK)]	1.2759 (0.4503)	1.4080 (0.5209)
M[log(MRPL)]	0.2542 (0.4138)	0.2501 (0.4612)
90 th -10 th	1.2532 (0.5018)	1.3163 (0.5330)
75 th -25 th	0.6175 (0.2567)	0.6587 (0.3036)
Age	13.07 (15.11)	15.92 (13.54)
Ownership	0.2484 (0.2248)	0.2183 (0.2162)
Export/VA	0.9112 (0.9859)	1.3188 (2.4652)
Tax Dummy	0.7413 (0.1593)	0.7537 (0.1660)
Tax/VA	0.0242 (0.0188)	0.0775 (0.5309)
Subsidy Dummy	0.1580 (0.0901)	0.1471 (0.0973)
Subsidy/VA	0.0206 (0.0535)	0.0077 (0.1042)
Interest Dummy	1.7780 (0.1599)	1.7451 (0.1877)
Interest/Debt	0.0392 (0.0333)	0.0366 (0.0262)
Number of Industries	73	160

Notes: V[log(TFPR)] denotes the average variance of logged TFPR across four-digit industries. M[log(TFPR)], M[log(TFPQ)], M[log(MRPK)] and M[log(MRPL)] are the mean values of logged TFPR, TFPQ, MRPK and MRPL, respectively. 90th-10th and 75th-25th refer to the interdecile and interquartile differences in log(TFPR) of four-digit industries. Age is the average age of the firms in an industry. Export/VA is the ratio of the value of export to value/added. Ownership measures the percentage of state-owned firms in an industry. Tax dummy, subsidy dummy and interest dummy indicate the proportion of firms who paid taxes, received subsidies and paid interest. Tax/VA and subsidy/VA refer to the ratio of tax to value-added, and subsidy to value-added. Interest/Debt denotes the ratio between interest payment and total debt. Standard errors are in parenthesis.

Table A3: Sample Selection with Balanced Panel

	WTO	Non-SOEs	Non-SOEs (Revenue > 6 million)	SOEs and non-SOEs (Revenue > 6 million)	Capital share 0.35	Wage bill	Placebo test	Initial covariates
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Supported * Post2000	0.0298** (0.0136)	0.0447** (0.0181)	0.0447*** (0.0164)	0.0376* (0.0197)	-0.0020 (0.0247)	0.0317 (0.0216)		0.0459** (0.0182)
Supported * Year2000							-0.0222 (0.0164)	
Number of Industries	2464	1616	1560	1824	1856	1864	1864	1864
R ²	0.911	0.812	0.822	0.793	0.631	0.634	0.791	0.790

Notes: The dependent variable is the variance of log(TFPR) across columns. Column (1) also includes variables indicating industry's non-tariff-barriers and foreign direct investment restrictions. Column (2) includes only non-SOEs. Column (3) includes only non-SOEs too, but only the non-SOEs whose nominal revenue is larger than 6 million yuan. Column (4) includes all SOEs, and non-SOEs whose nominal revenue is larger than 6 million yuan. Following Gopinath et al. (2017), we set capital and labor shares to 0.35 and 0.65 for all industries and years in column (5). Labor input is measured by wage bill in computing TFPR in column (6). Column (7) reports a placebo test where the year 2000 is taken as the year the plan was in place. The interactions between the time dummy and the initial values of covariates indicting industry's age, export status, ownership and size are controlled in column (8), which the values of covariates in the year 1999 are taken as the initial values. Other control variables include the maximum allowable input and output tariffs, ratio of state-owned enterprise in an industry, average age of firms in an industry, and average export to value-added ratio in an industry. Year and four-digit industry fixed effects are controlled across columns. Parentheses report robust standard errors clustered industry. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Table A4: Further Robustness Checks with Balanced Panel

	Balanced Industry	WLS	Year 2-digit Industry FE	9 th Five Year Plan	Small Industries	With 99 th and 1 st Percentiles	Excluded Outliers	Anticipating Effects
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Supported * Post2000	0.0297* (0.0159)	0.0614** (0.0303)	0.1304** (0.0512)	0.0265* (0.0156)	0.0362* (0.0199)	0.0576** (0.0270)	0.0452*** (0.0172)	0.0448 (0.0278)
Maximum Allowable Input Tariff	0.0038 (0.0073)	0.0029 (0.0054)	0.0051 (0.0114)	0.0051 (0.0057)	0.0027 (0.0061)	0.0097 (0.0107)	0.0078 (0.00511)	0.0037 (0.0067)
Maximum Allowable Output Tariff	-0.0059*** (0.0020)	-0.0067*** (0.0019)	-0.0012 (0.0024)	-0.0043** (0.0019)	-0.0043** (0.0021)	-0.0069** (0.0027)	-0.0056*** (0.0020)	-0.0049** (0.0021)
Ownership	-0.1881 (0.1251)	-0.3190* (0.1820)	-0.0668 (0.0632)	-0.2556 (0.1584)	-0.1730 (0.1166)	-0.4067 (0.3193)	-0.180 (0.132)	-0.2178 (0.1993)
Export/VA	-0.0000 (0.0000)	0.0000*** (0.0000)	0.0000 (0.0000)	0.0000*** (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000** (8.24e-08)	0.0000 (0.0000)
Age	0.0014 (0.0013)	0.0003 (0.0006)	0.0010* (0.0005)	0.0004 (0.0004)	0.0008 (0.0005)	0.0009 (0.0009)	0.000885 (0.0006)	0.0008 (0.0005)
Supported * 1999								0.0070 (0.0256)
Supported * 2000								0.0101 (0.0264)
Number of Industries	2136	1863	1864	2504	2323	1888	1832	1864
R ²	0.835	0.862	0.562	0.812	0.696	0.708	0.800	0.792

Notes: Dependent variable is $V[\log(\text{TFPR})]$ across columns. The sample in column (1) kept firms with changing industry codes over years. Column (2) shows the results with weighted least square method, which value-added of each industry in each year is used as the weights. The interaction of year and two-digit industry is controlled in column (3). Column (4) includes the industries supported by the 9th Five Year Plan. Column (5) includes the small industries with less than 10 firms in a year. Column (6) includes those firms whose TFPR is larger than the 99% percentile or smaller than the 1% percentile. Industries with the largest or smallest TFPR values are further dropped, and the results are shown in (7). Column (8) introduces the interactions between Supported and year dummies to examine the anticipating effects. The year of 1998 was omitted as comparison. The parentheses report robust standard errors clustered by four-digit industry. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Table A5: Mean of TFPR, TFPQ, MRPK and MRPL with Balanced Panel

	M[log(TFPR)]	M[log(TFPQ)]	M[log(MRPK)]	M[log(MRPL)]
	(1)	(2)	(3)	(4)
Supported*Post2000	0.0418** (0.0197)	0.0520* (0.0268)	0.0569* (0.0317)	-0.0120 (0.0283)
Maximum Allowable Input Tariff	0.0013 (0.0074)	0.0034 (0.0113)	0.0092 (0.0109)	0.0173* (0.0091)
Maximum Allowable Output Tariff	-0.0001 (0.0021)	0.0015 (0.0028)	0.0006 (0.0030)	0.0053** (0.0022)
Ownership	-0.0468 (0.1550)	-0.1790 (0.2010)	-0.1530 (0.2200)	-0.745*** (0.2065)
Export/VA	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
Age	0.0001 (0.0005)	0.0000 (0.0007)	0.0003 (0.0008)	-0.0001 (0.0007)
Number of Industries	1864	1864	1862	1864
R ²	0.858	0.904	0.819	0.872
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes

Notes: M[log(TFPR)], M[log(TFPQ)], M[log(MRPK)] and M[log(MRPL)] are the mean values of logged TFPR, TFPQ, MRPK and MRPL, respectively. The parentheses report robust standard errors clustered by four-digit industry. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Table A6: Effects of the 10th Five Year Plan on TFPR Dispersions with Balanced Panel

	Observed distribution	Counterfactual distribution	Support effects
	(1)	(2)	(3)
Balanced panel - unconditional			
Mean	1.6673 (0.0550)	1.4881 (0.0750)	0.1792 (0.0936)
Variance	0.4605 (0.0682)	0.2546 (0.0531)	0.2059 (0.0864)
Balanced panel - residualized			
Mean	1.5214 (0.0949)	1.3411 (0.1082)	0.1802 (0.0971)
Variance	0.4562 (0.0644)	0.2551 (0.0512)	0.2012 (0.0814)

Notes: Column (1) shows the observed distribution of firms in supported industries, and column (2) shows the distribution for the same firms in the absence of support. Column (3) shows the effects of the Five-Year Plan on firms from the supported industries. Standard errors in parentheses are from 1,000 bootstrap iterations.

Table A7: Taxes, Subsidies, and Interest Payments with Balanced Panel

	Tax Dummy	Tax /Value-added	Subsidy Dummy	Subsidy /Value-added	Interest Payment	Interest /Debt
	Probit	Tobit	Probit	Tobit	Ordered Probit	OLS
	(1)	(2)	(3)	(4)	(5)	(6)
Supported*Post2000	0.0301* (0.0171)	0.0009 (0.0025)	0.0608*** (0.0177)	0.0462*** (0.0152)	-0.0321* (0.0184)	-0.0032 (0.0223)
Maximum Allowable Input Tariff	0.0066 (0.0080)	0.0019 (0.0012)	-0.0127 (0.0083)	-0.0103 (0.0071)	-0.0322*** (0.0080)	-0.0106 (0.0104)
Maximum Allowable Output Tariff	0.0016 (0.0017)	8.14e-06 (0.0003)	0.0015 (0.0019)	0.0021 (0.0016)	2.24e-05 (0.0018)	-0.0002 (0.0022)
Export/VA	-0.5430*** (0.0099)	-0.0053*** (0.0003)	0.0127*** (0.0014)	0.0074*** (0.0008)	-0.0011 (0.0011)	-0.0013 (0.0015)
Age	0.0003*** (6.20e-05)	1.36e-05 (9.24e-06)	9.20e-05 (6.95e-05)	8.70e-05 (5.91e-05)	0.0003*** (6.35e-05)	-2.32e-05 (8.47e-05)
Ownership	0.4360*** (0.0135)	0.0250*** (0.0017)	0.2250*** (0.0116)	0.1820*** (0.0098)	-0.1605*** (0.0121)	-0.0359** (0.0154)
Number of Firms	141,189	141,514	141,514	141,514	141,514	141,150

Notes: This table reports regression estimates in which the dependent variable is a method of support. Tax Dummy equals 1 if a firm pays taxes. Subsidy Dummy equals 1 if a firm receives subsidy. Interest payment takes value 1, 2, or 3, corresponding to whether a firm pays negative, zero, or a positive interest rate. Each regression includes year and four-digit industry fixed effects. Standard errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Table A8: Effect on Tax Payments by TFPR Tier with Balanced Panel

	Top Tier		Bottom Tier	
	Tax Dummy	Tax /Value-added	Tax Dummy	Tax /Value-added
	(1)	(2)	(3)	(4)
SupportedPost2000	0.0320 (0.0301)	0.0015 (0.0017)	0.0037 (0.0298)	-0.0066 (0.0079)
Maximum Allowable Input Tariff	0.0045 (0.0130)	0.0019** (0.0008)	0.0228 (0.0145)	0.0024 (0.0039)
Maximum Allowable Output Tariff	0.0019 (0.0027)	-0.0004** (0.0002)	0.0021 (0.0031)	0.0003 (0.0008)
Export/VA	-0.0772*** (0.0040)	-0.0161*** (0.0010)	-0.621*** (0.0172)	-0.0072*** (0.0006)
Age	0.0002** (0.0001)	1.00e-05 (6.18e-06)	0.0002** (9.62e-05)	7.98e-06 (2.71e-05)
Ownership	0.2510*** (0.0239)	0.0028** (0.0012)	0.5680*** (0.0223)	0.0672*** (0.0050)
Number of Firms	52,171	52,556	43,811	44,146

Notes: Tax Dummy equals 1 if a firm pays taxes. Each regression includes year and four-digit industry fixed effects. As firms' TFPR increases, the number of firms in the top tier is more than that in the bottom. Standard errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Table A9: Effect on Subsidies by TFPR Tier with Balanced Panel

	Top		Bottom	
	Subsidy Dummy (1)	Subsidy /Value-added (2)	Subsidy Dummy (3)	Subsidy /Value-added (4)
Supported*Post2000	0.0043 (0.0325)	0.0044 (0.0066)	0.1048*** (0.0307)	0.1188*** (0.0427)
Maximum Allowable Input Tariff	-0.0227 (0.0141)	-0.0033 (0.0028)	0.0040 (0.0149)	-0.0108 (0.0206)
Maximum Allowable Output Tariff	0.0017 (0.0032)	0.0007 (0.0007)	0.0006 (0.0033)	0.0042 (0.0045)
Export/VA	0.0414*** (0.0045)	0.0077*** (0.0009)	0.0054*** (0.0016)	0.0067*** (0.0019)
Age	0.0001 (0.0001)	4.66e-05* (2.59e-05)	0.0001 (0.0001)	0.0001 (0.0002)
Ownership	0.2150*** (0.0217)	0.0505*** (0.0043)	0.2272*** (0.0192)	0.2960*** (0.0265)
Number of Firms	52,297	52,556	44,127	44,146

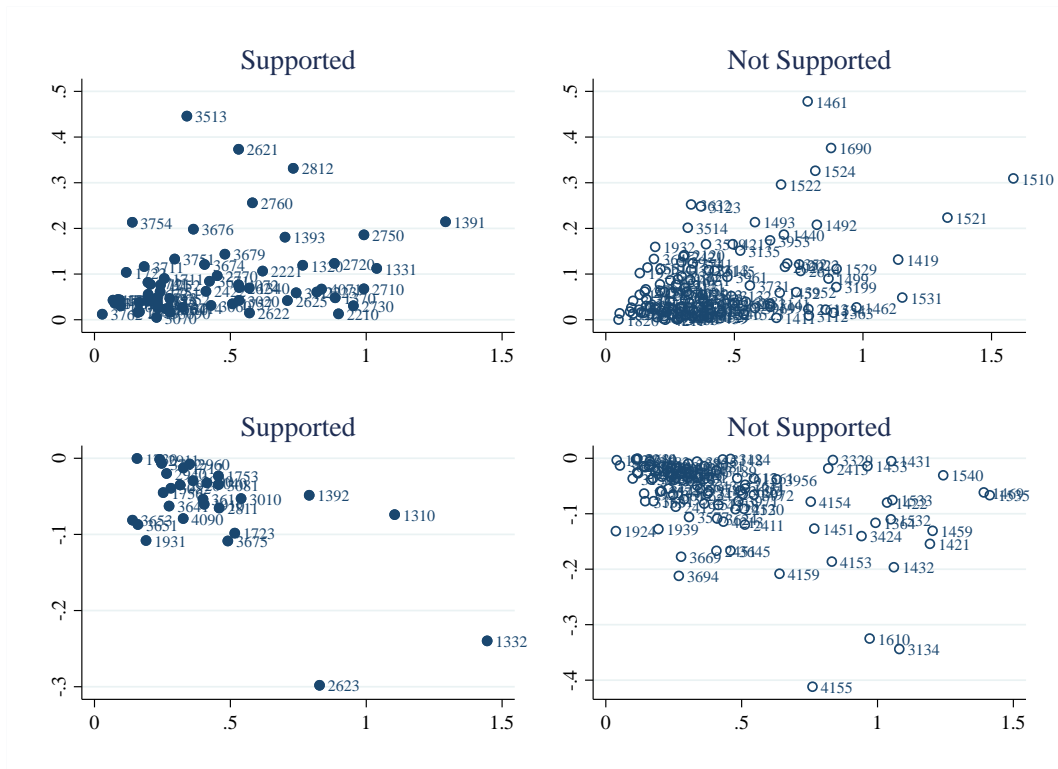
Notes: Subsidy Dummy equals 1 if a firm receives subsidy. Each regression includes year and four-digit industry fixed effects. As firms' TFPR increases, the number of firms in the top tier is more than that in the bottom. Standard errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Table A10: Effects on Interest Payments by TFPR Tier with Balanced Panel

	Top		Bottom	
	Interest Payment	Interest /Debt	Interest Payment	Interest /Debt
	(1)	(2)	(3)	(4)
Supported*Post2000	-0.0485 (0.0310)	-0.0582* (0.0326)	-0.0240 (0.0330)	-0.0107 (0.0068)
Maximum Allowable Input Tariff	-0.0319** (0.0128)	-0.0103 (0.0143)	-0.0126 (0.0148)	-0.0030 (0.0033)
Maximum Allowable Output Tariff	0.0001 (0.0028)	-0.0019 (0.0031)	-0.0059* (0.0034)	0.0002 (0.0007)
Export/VA	0.0040 (0.0047)	-0.0106** (0.0052)	-0.0025 (0.0015)	0.0004 (0.0004)
Age	0.0002** (9.92e-05)	-3.89e-05 (0.0001)	0.0001 (0.0001)	0.0000 (0.0000)
Ownership	-0.2470*** (0.0206)	-0.0596** (0.0237)	-0.1030*** (0.0211)	-0.0140*** (0.0045)
Number of Firms	52,556	52,350	44,146	44,069

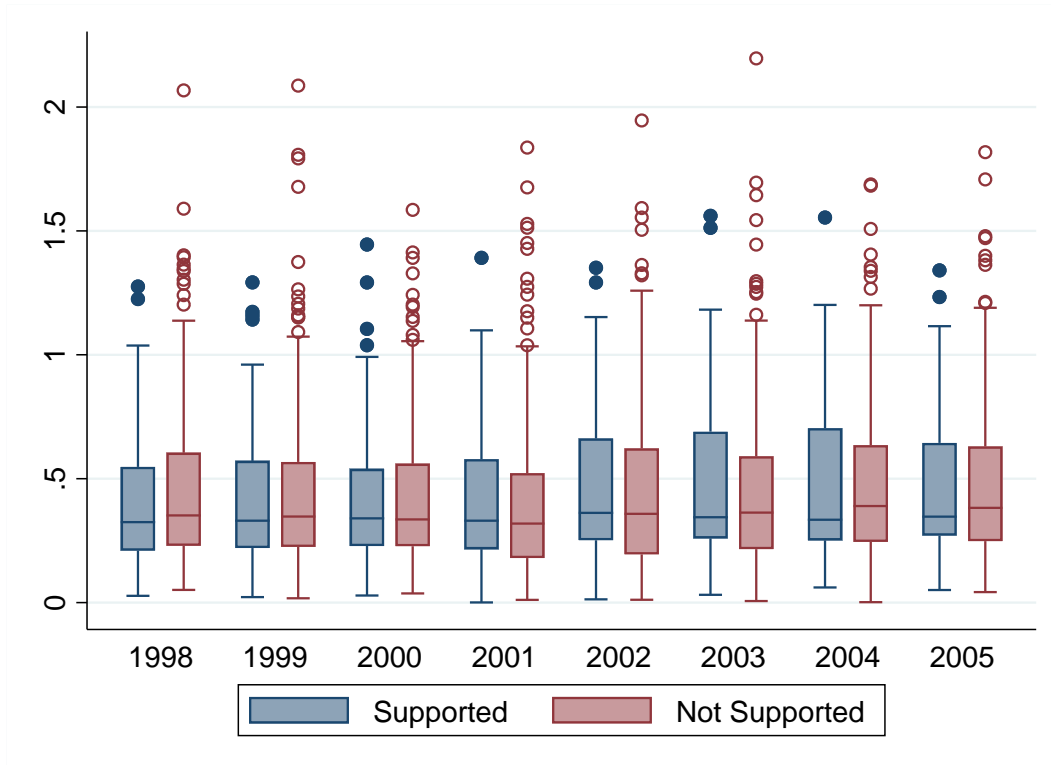
Notes: Interest payment takes value 1, 2, or 3, corresponding to whether a firm pays negative, zero, or a positive interest rate. Each regression includes year and four-digit industry fixed effects. Standard errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.

Figure A1: Changes in Variance of TFPR of Supported and Not Supported Industries



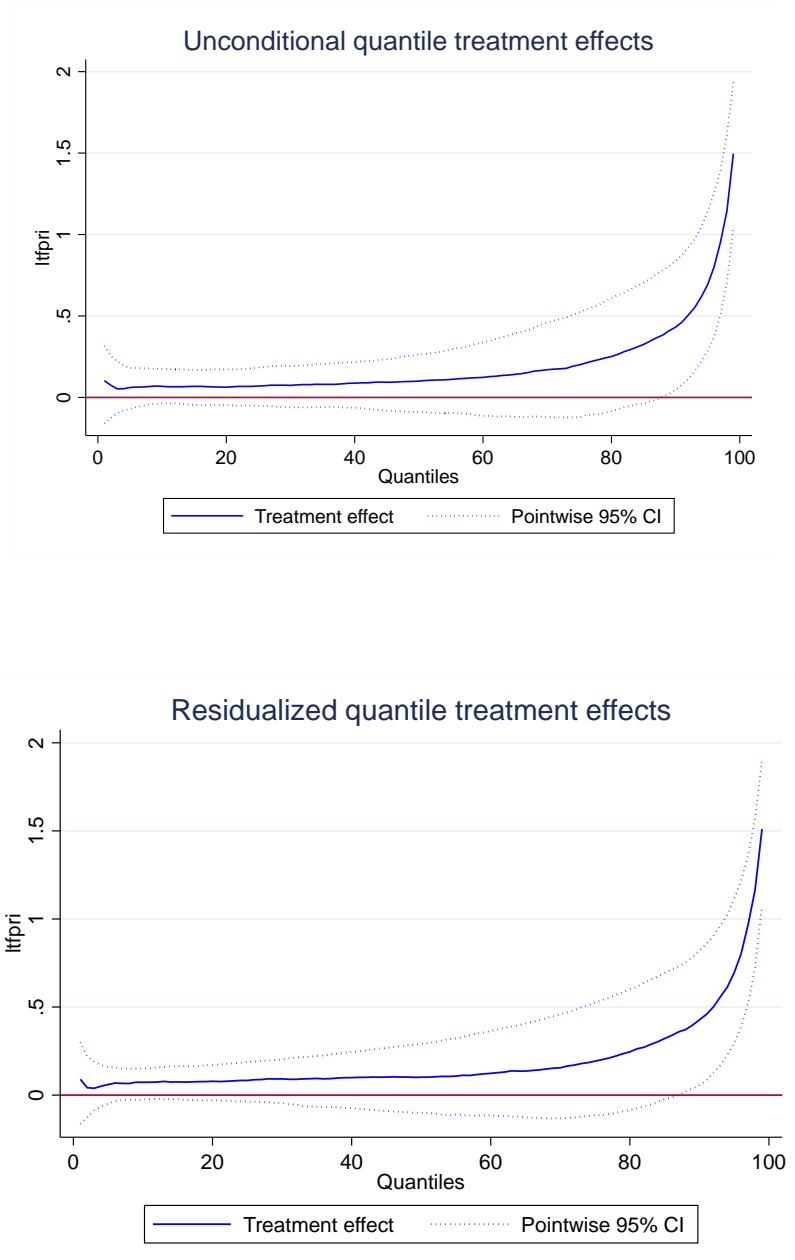
Notes: Each dot denotes a four-digit industry. The horizontal axis records the industry's average variance of TFPR in 2000 –before the implementation of the 10th Five-Year Plan—and the vertical axis records the average change in the TFPR variance between 1998-2000 and 2001-2005 --before and after the 10th Five Year Plan. For the supported group, 65 out of 93 industries experienced an increase in misallocation, while only 28 did not.

Figure A2: Variance of Supported and Not Supported Industries



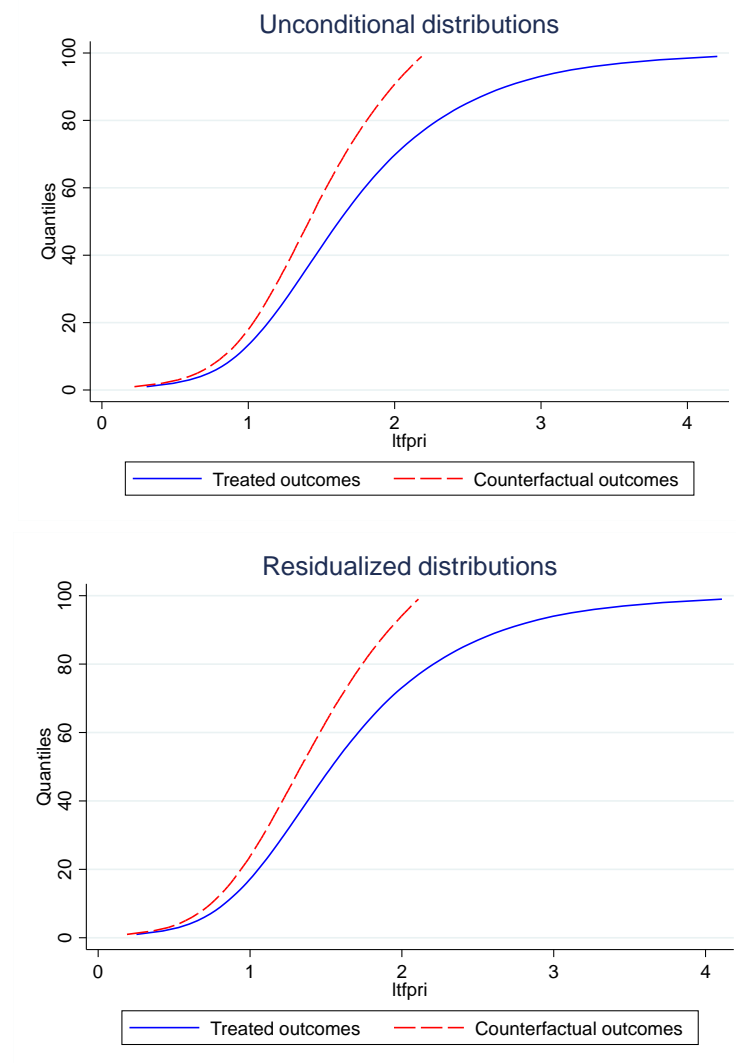
Notes: The lowest (highest) line is the lower (upper) adjacent value. The lower (higher) hinge of the box is the 25th (75th) percentile. The middle line inside the box is the median. The dots on the top are the outside values.

Figure A3: Quantile Treatment Effects of the 10th Five-Year Plan on Firm's TFPR



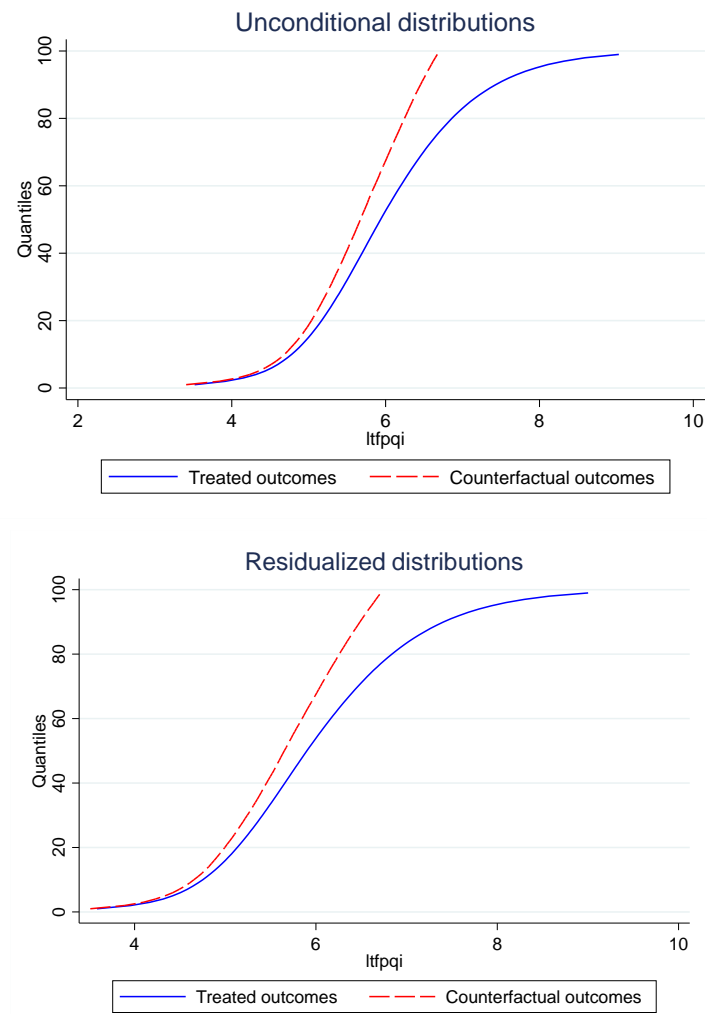
Notes: The data used is the firm level balanced panel data. The control variables include firm's age, export to value-added, ownership, and input and output tariffs. Solid lines denote the effects of the 10th Five-Year Plan on changes at percentiles of firms' TFPR, and dash lines are 5% confidence intervals.

Figure A4: Quantile Treatment Effects of the 10th Five-Year Plan on Firms' TFPR



Notes: The covariates include firm's age, export to value-added, and firm's ownership.

Figure A5: Quantile Treatment Effects of the 10th Five-Year Plan on Firms' TFPQ



Notes: The covariates include firm's age, export to value-added, and firm's ownership.