**Firms by type of ownership and industry**

|  |  |  |
| --- | --- | --- |
| **Property-Types of firms** | **Non financial firms** | **Financial firms** |
| **1** | **2** | **3** | **4** | **5** | **N/E** | **1** | **2** | **3** | **4** | **5** |
| **1923** | 18% | 77% |  |  | 4% | 1% | 52% | 36% | 12% |  |  |
| **1937** | 50% | 48% |  |  | 1% | 1% | 32% | 44% | 20% | 4% |  |
| **1944** | 47% | 49% |  |  | 4% |  | 40% | 32% | 28% |  |  |
| **1954** | 29% | 62% | 1% |  | 4% | 4% | 28% | 32% | 28% | 12% |  |
| **1970** | 53% | 32% | 7% | 1% | 7% |  | 29% | 32% | 36% |  | 4% |
| **1990** | 41% | 43% | 9% |  | 6% | 1% | 24% | 40% | 32% |  | 4% |
| **2000** | 68% | 29% |  |  | 3% |  | 56% | 20% | 16% | 4% | 4% |

1=Foreign, 2=Private National, 3=State, 4=State-Private National, 5=Foreign-Private National

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year-activity** | **Total # firms** | **1** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **N/A** |
| **1923** | 125 | 20% | 3% | 3% | 10% | 34% |   | 3% | 1% | 2% |   | 2% | 4% | 13% | 5% | 1% |
| **1937** | 125 | 20% | 1% | 11% | 9% | 26% | 2% | 5% | 1% | 9% | 1% | 1% | 5% | 5% | 4% | 1% |
| **1944** | 125 | 20% |   | 12% | 3% | 35% | 1% | 6% |   | 6% |   | 2% | 2% | 6% | 7% |   |
| **1954** | 125 | 20% |   | 4% | 6% | 58% | 1% | 2% |   |   |   | 1% |   | 1% | 6% | 2% |
| **1970** | 123 | 23% | 1% | 2% | 1% | 65% | 1% | 5% |   | 1% |   |   | 1% |   |   |   |
| **1990** | 127 | 20% | 1% | 5% | 10% | 52% |   | 6% | 2% |   |   | 3% | 2% |   |   | 1% |
| **2000** | 125 | 20% | 3% | 12% | 13% | 38% |   | 6% |   |   |   | 2% | 2% |   | 3% |   |

1=Financials, 3=Service Industry, 4=Electric utility, water, telephone and gas, 5=Trade Companies, 6=Industrial companies, 7=Mining industry, 8=Oil companies, 9=Shipping Industry, 10=Railway companies, 11=Tramway companies, 12=Building companies, 13=Transport, warehousing and communication, 14=Primary activities (agriculture, cattle and lands), 15= Holding-Financial firms.

**Argentina general indicators**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **MNEs dominant in top 100 firms(not including joint-ventures)** | **Industry, dominant activity** | **% of firms also in sample previous year** | **Important changes in Laws (Boards)** | **Inflation** | **Open to FDI** | **Political Violence** | **Presidents (6 year mandate)** |
| 1923 | no | no (42%) |  | no |  | yes | no |  |
| 1937 | no | no (33%) | 44 | no | deflation | yes | no | 4 |
| 1944 | no | no (44%) | 66 | no | 12.3 total in the entire period | yes | no | 3 |
| 1954 | no | yes (73%) | 38 | no | 204 | yes, but nationalization of railroads and public utilities | no | 2 |
| 1970 | yes | yes (85%) | 32 | no | 444,5 | yes | yes | 7 |
| 1990 | no | yes (65%) | 37 | yes (1972 and 1983) | 9280 idem (5393 in 1989 and 2000) | yes - with the exception of 1973-1976 years | yes | 11 |
| 2000 | yes | no (47%) | 41 | yes, liabilities of directors (court rules) | 213.6 idem (171 in 2001) | yes, large program of privatizations | no | 1 |

**Top firms by Eigenvector and Betweenness centrality**

|  |  |  |
| --- | --- | --- |
| **1923** | **1937** | **1944** |
| **Firm** | **Eigenvector** | **Firm** | **Eigenvector** | **Firm** | **Eigenvector** |
| Piccardo y Cia | 91,3 | Cia.Argentina de Electricidad | 108,1 | Cia. Argentina de Electricidad | 75,0 |
| Introductora de Buenos Aires | 58,7 | Electricidad de la Prov. De Bs Aires | 60,4 | Argentina de Nav. Dodero | 55,1 |
| Talleres Metalurgicos | 47,4 | Cia. Gral. De Ind. y Transp. | 38,8 | Cia. Gral. de Ind. y Transp. | 54,2 |
| Tornquist Ernesto y Cia | 37,3 | Territorial Rio de la Plata | 22,2 | Electricidad de la Prov. De Bs Aires | 44,6 |
| La Criolla | 31,9 | Tornquist Ernesto y Cia.  | 22,0 | Banco Central | 30,6 |
| Azucarera Tucumana | 30,3 | General de Comercio e Industria | 20,0 | Talleres Met. San Martín  | 22,7 |
| General de Comercio e Industria | 26,6 | Arg de Nav Mihanovich | 17,1 | Electricidad de los Andes  | 21,8 |
| Sansinena  | 23,1 | Sansinena | 15,9 | Ferrocarril Gran Sud de Bs. Aires | 20,1 |
| Bagley | 18,0 | Electricidad de los Andes | 12,2 | Ferrocarril Oeste de Buenos Aires | 20.1 |
| Destilerías, Bodegas y Viñedos el Globo | 16,6 | Piccardo y Cia | 11,4 | Unión Telef del Río de la Plata | 19,9 |
| Bodegas y Viñedos Domingo Tomba | 14,2 | Introductora de Buenos Aires | 9,1 | Minera Aguilar | 19,4 |
| Fab. Arg. De Alparagatas | 12,9 | Primitiva de Gas de Buenos Aires | 9,0 | Ferrocarril Bahía Blanca Nord Oeste | 19,4 |

|  |  |  |
| --- | --- | --- |
| **1923** | **1937** | **1944** |
| **Firm** | **Betweenness** | **Firm** | **Betweenness** | **Firm** | **Betweenness** |
| Sansinena | 7,2 | Cia. Argentina de Electricidad  | 9,6 | Banco Central  | 13,9 |
| Bodegas y Viñedos Domingo Tomba | 6,8 | Arg de Nav Mihanovich | 5,4 | Argentina de Nav. Dodero | 8,2 |
| Piccardo y Cia | 6,8 | Banco Central | 4,9 | Unión Telef del Río de la Plata | 5,1 |
| Astra | 5,4 | Cia Gral de Fósforos Sudamericana | 4,6 | Cia. Argentina de Electricidad  | 4,7 |
| Banco de la Prov. De Buenos Aires | 4,8 | Mercado Central de Frutos | 3,2 | Bco de la Prov.de Buenos Aires | 4,2 |
| Ingenio y Refinería Santa Ana | 4,7 | Bco. Prov de Buenos Aires | 3,1 | Crédito Ind. Com. Argentino | 3,9 |
| Banco de Italia y Rio de la Plata | 3,9 | Sansinena de Carnes Congeladas | 2,5 | Diadema Argentina de Petróleo | 3,1 |
| Ginocchio Bartolomé e hijos | 3,4 | Fab. Arg. De Alpargatas | 2,4 | Cia. Electrica de los Andes  | 3,0 |
| Ferrocarril Central Argentino | 3,0 | Electricidad de los Andes | 2,2 | Italo Argentina de Electricidad | 3,0 |
| Italo Argentina de Electricidad | 2,9 | Cristalerías Rigolleau | 2,2 | Bco de Italia y Rio de la Plata  | 2,9 |
| Banco Argentino Uruguayo | 2,8 | Astra | 2,1 | The Western Telegraph | 2,6 |
| Leachs Argentine States | 1,9 | Bco de Italia y Rio de la Plata | 2,1 | Cia. Gral. de Fósforos Sudamericana  | 2,2 |
| Destilerías, Bodegas y Viñedos el Globo | 1,9 |  |  | Fab. Arg. de Alpargatas | 5.5 |

**Top firms by Eigenvector and Betweenness centrality (Continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| **1954**  | **1970** | **1990** | **2000** |
| **Firm** | **Eigenvector** | **Firm** | **Eigenvector** | **Firm** | **Eigenvector** | **Firm** | **Eigenvector** |
| Cia. Argentina de Electricidad | 107,6 | Dalmine | 85,7 | Banco de Quilmes | 138,4 | YPF | 104,2 |
| Ernesto Tornquist | 39,2 | Banco Shaw | 74,4 | Astra | 18,6 | Astra | 88,5 |
| Talleres Metalúrgicos San Martin | 34,9 | Metcon | 52,0 | Ipako | 15,5 | Eg3 | 32,7 |
| Ferrum-Cerámica y Metalurgia | 34,0 | Electroclor | 35,3 | Bayer | 14,1 | Import Export Patagonia | 12,8 |
| Introductora Buenos Aires | 29,8 | Somisa | 24,2 | Siderca | 3,3 | Aguas Argentinas | 7,7 |
| Cia. Electrica de los Andes | 27,2 | Loma Negra | 22,8 | Petroquimica Bahia Blanca | 3,3 | Banco Galicia | 2,2 |
| Fab. Arg. De Alpargatas | 23,2 | Duperial | 22,3 | Polisur | 3,2 |  |  |
| Cia. Electricidad Sud Argentino | 21,7 | Acindar | 17,7 | IBM Argentina | 2,0 |  |  |
| La Forestal | 20,5 | Siemens | 16,6 | Swift Armour | 1,9 |  |  |
| Soc. Comercial del Plata | 17,6 | Transax | 15,2 | Ledesma | 1,8 |  |  |
| Minera Aguilar | 15,7 | Fiat | 12,7 | Propulsora | 1,1 |  |  |
| Nobleza de Tabacos  | 13,6 | Ford | 12,0 | Techint | 1,1 |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **1954** | **1970** | **1990** | **2000** |
| **Firm** | **Betweenness** | **Firm** | **Betweenness** | **Firm** | **Betweenness** | **Firm** | **Betweenness** |
| Cia. de Fosforos Sud Americana | 15,1 | Crist. Rigolleau | 10,3 | Ipako | 53,7 | Imp. y Exp. Patagonia | 0,08 |
| Minera Aguilar | 13,9 | Minera Aguilar | 7,8 | Siderca | 44,4 | Telefonica | 0,08 |
| Soc. Comercial del Plata | 10,6 | Cia. Italo Argentina de Electricidad | 7,0 | Bayer | 37,2 | YPF | 0,08 |
| Bco. Hipotecario Nacional | 10,2 | Loma Negra | 6,0 | Swift Armour | 24,7 | Perez Companc | 0,06 |
| Cia. Argentina de Electricidad | 6,9 | Celulosa | 4,5 | Alpargatas | 19,0 | Banco Galicia | 0,05 |
| Sulfacid | 5,6 | Acindar | 4,3 | Bco Frances  | 14,3 | Central Puerto | 0,05 |
| Dalmine | 5,1 | Electroclor | 3,8 | Petroquimica B. Blanca | 12,9 | Telefonica Personal | 0,05 |
| Papelera Rio Parana | 4,4 | Refinerias de maiz | 3,5 | Indupa | 10,4 |  |  |
| Est. Metalurgico Santa Rosa | 3,7 | PASA | 3,0 | Propulsora | 10,2 |  |  |
| SOMISA | 3,7 | Duperial | 3,1 | La Continental | 9,1 |  |  |
| Pirelli | 3,6 | Union Carbide-Eveready | 2,4 | Sevel Argentina | 9,1 |  |  |
| Banco de Italia y Rio de la Plata | 3,6 | Anglo | 2,4 |  |  |  |  |

**Top central firms by type ownership and activity**

|  |
| --- |
| **Top central firms by type of ownership (%)** |
| **Eigenvector** | **Betweenness** |
| **Year** | **1** | **2** | **3** | **4** | **5** | **Total** | **Year** | **1** | **2** | **3** | **4** | **5** | **Total** |
| 1923 |   | 100 |   |   |   | 12 | 1923 | 15 | 62 | 8 | 8 |   | 13 |
| 1937 | 42 | 58 |   |   |   | 12 | 1937 | 17 | 67 | 8 | 8 |   | 12 |
| 1944 | 75 | 17 |   | 8 |   | 12 | 1944 | 38 | 38 | 8 | 8 | 8 | 13 |
| 1954 | 42 | 42 |   |   | 17 | 12 | 1954 | 33 | 42 | 17 |   | 8 | 12 |
| 1970 | 50 | 33 | 8 |   | 8 | 12 | 1970 | 42 | 33 |   |   | 25 | 12 |
| 1990 | 42 | 50 |   |   | 8 | 12 | 1990 | 45 | 45 |   |   | 9 | 11 |
| 2000 | 67 | 33 |   |   |   | 6 | 2000 | 43 | 43 |   |   | 14 | 7 |

1=Multinationals, 2=Private National, 3=State, 4=State-Private National, 5=Foreign-Private National

|  |
| --- |
| **Top Central firms by activity (%)** |
|  **Betweenness** | **Eigenvector** |
| Year | **1** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **Total** | **1** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **Total** |
| 1923 | 23 | 8 |   |   | 46 |   | 8 |   | 8 |   |   | 8 |   |   | **13** |   | 8 |   | 8 | 67 |   |   |   |   |   |   |   | 8 | 8 | **12** |
| 1937 | 25 |   | 17 | 8 | 33 |   | 8 | 8 |   |   |   |   |   |   | **12** | 8 | 8 | 33 | 8 | 17 |   |   | 8 |   |   | 8 | 8 |   |   | **12** |
| 1944 | 23 |   | 38 |   | 15 |   | 8 |   |   |   |   | 8 |   | 8 | **13** | 8 |   | 33 |   | 8 | 8 |   |   | 25 |   |   | 17 |   |   | **12** |
| 1954 | 17 |   | 8 |   | 58 | 8 |   |   |   |   |   |   | 8 |   | **12** |   |   | 23 | 8 | 46 | 8 |   |   |   |   |   |   | 15 |   | **13** |
| 1970 |   |   | 8 |   | 83 | 8 |   |   |   |   |   |   |   |   | **12** | 8 |   |   |   | 92 |   |   |   |   |   |   |   |   |   | **12** |
| 1990 | 9 |   |   | 9 | 82 |   |   |   |   |   |   |   |   |   | **11** | 8 |   |   |   | 75 |   | 8 |   |   |   | 8 |   |   |   | **12** |
| 2000 | 14 |   | 43 | 14 |   |   | 14 |   |   |   |   |   | 14 |   | **7** | 17 |   | 17 | 17 |   |   | 50 |   |   |   |   |   |   |   | **6** |

1=Financials, 3=Service Industry, 4=Electric utility, water, telephone and gas, 5=Trade Companies, 6=Industrial companies, 7=Mining industry, 8=Oil companies, 9=Shipping Industry, 10=Railway companies, 11=Tramway companies, 12=Building companies, 13=Transport, warehousing and communication, 14=Primary activities (agriculture, cattle and lands), 15= Holding-Financial firms .