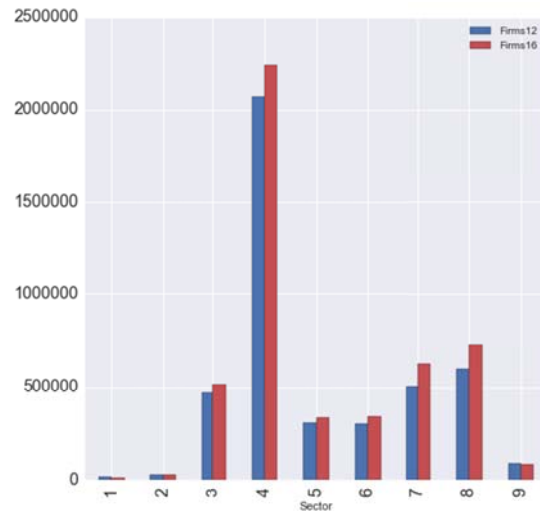
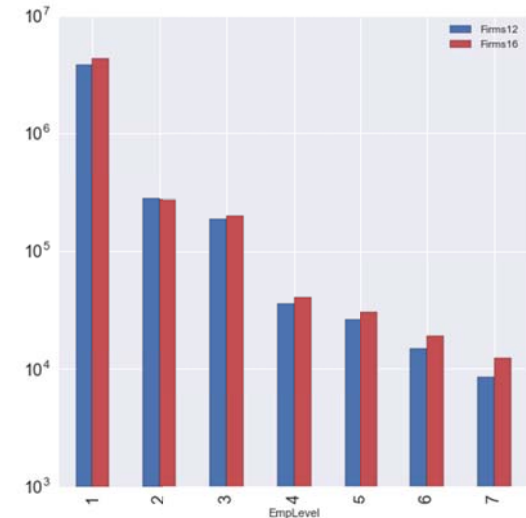


Number of Firms in Mexico by Sector and Size: 2012 – 2016



Sector
1 Ag, Forest, Fisheries
2 Mining
3 Manufacture
4 Construction
5 Energy Water
6 Trade, Restaurants, Hotels
7 Transport, Warehousing
8 Finance, Insurance, Realtors
9 Community, Social

Employment Range
1 [1,5]
2 [6,10]
3 [11,30]
4 [31,50]
5 [51,100]
6 [101,250]
7 [251,+]



Sectoral Firm Distribution in Mexico

Construction has the most firms. The number of firms increased in Sectors 3 to 8 over 2012 – 2016

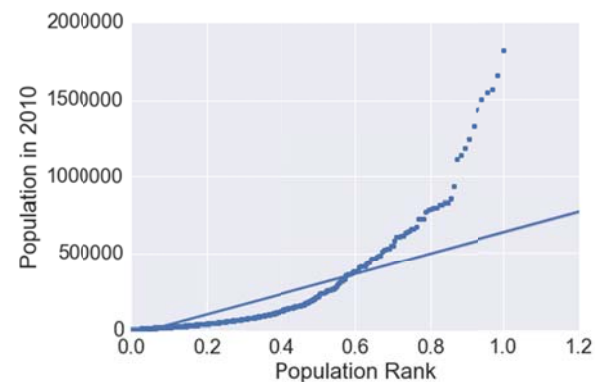
The number of firms grew in most sectors and employment ranges

Log Firm Size Distribution in Mexico

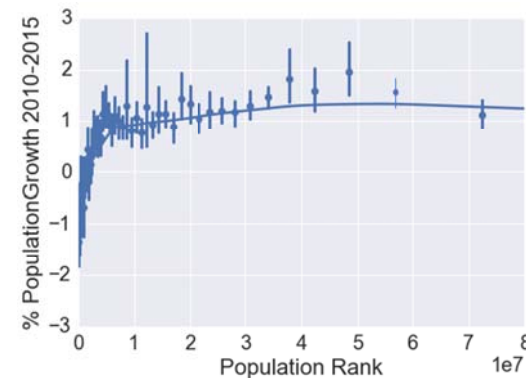
The larger the firm size, the less there are (logarithmic scale). Only the [6,10] range had less firms in 2016 than in 2012.

There is a history of migration in Mexico

Order Mexican municipalities according to their population. Let their rank be the number of people living in same size or smaller municipalities. Municipal population increases with rank



Migration continues, but to smaller places



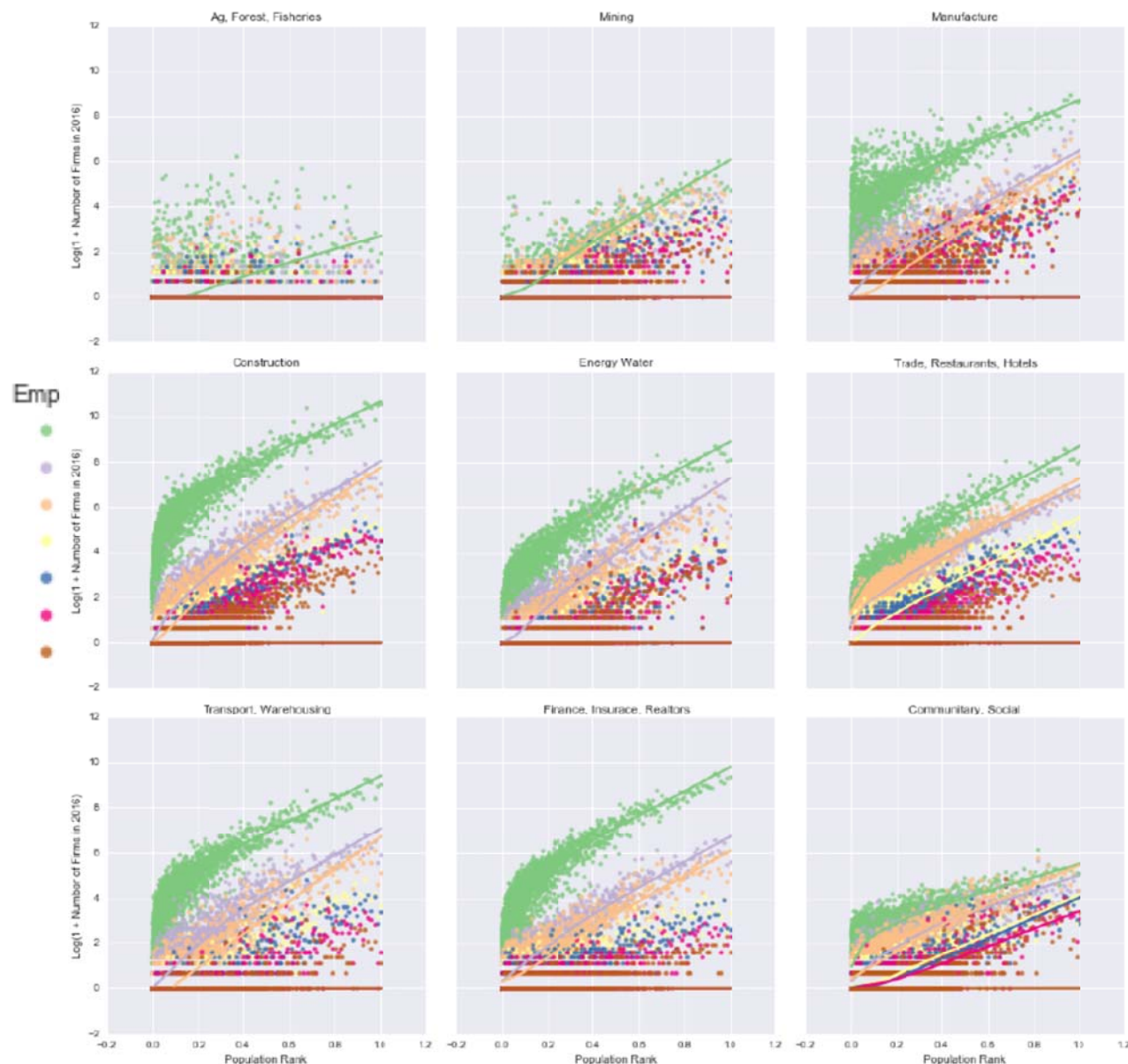
Over 2010-2015, population left the smallest municipalities and moved to slightly larger and to midsize municipalities

People go after Firms and Firms go after Firms and People

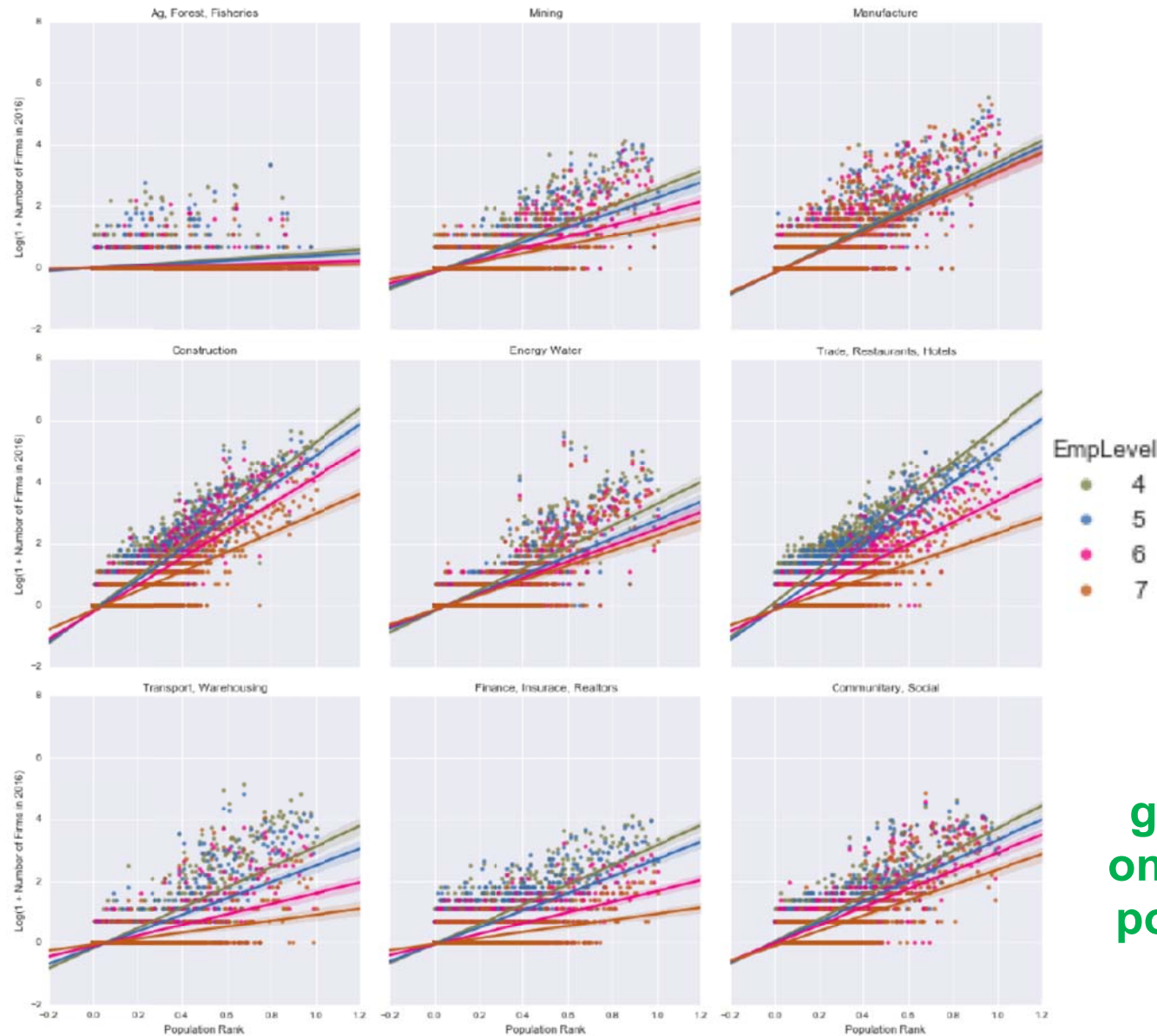
For each production sector 1-9 the number of firms is plotted logarithmically across the population rank.

This grows approximately linearly for many of the employment ranges.

After a threshold, number of firms grows exponentially on average across the population ranking of Mexican municipalities



Focusing on Larger (and Fewer) Firms



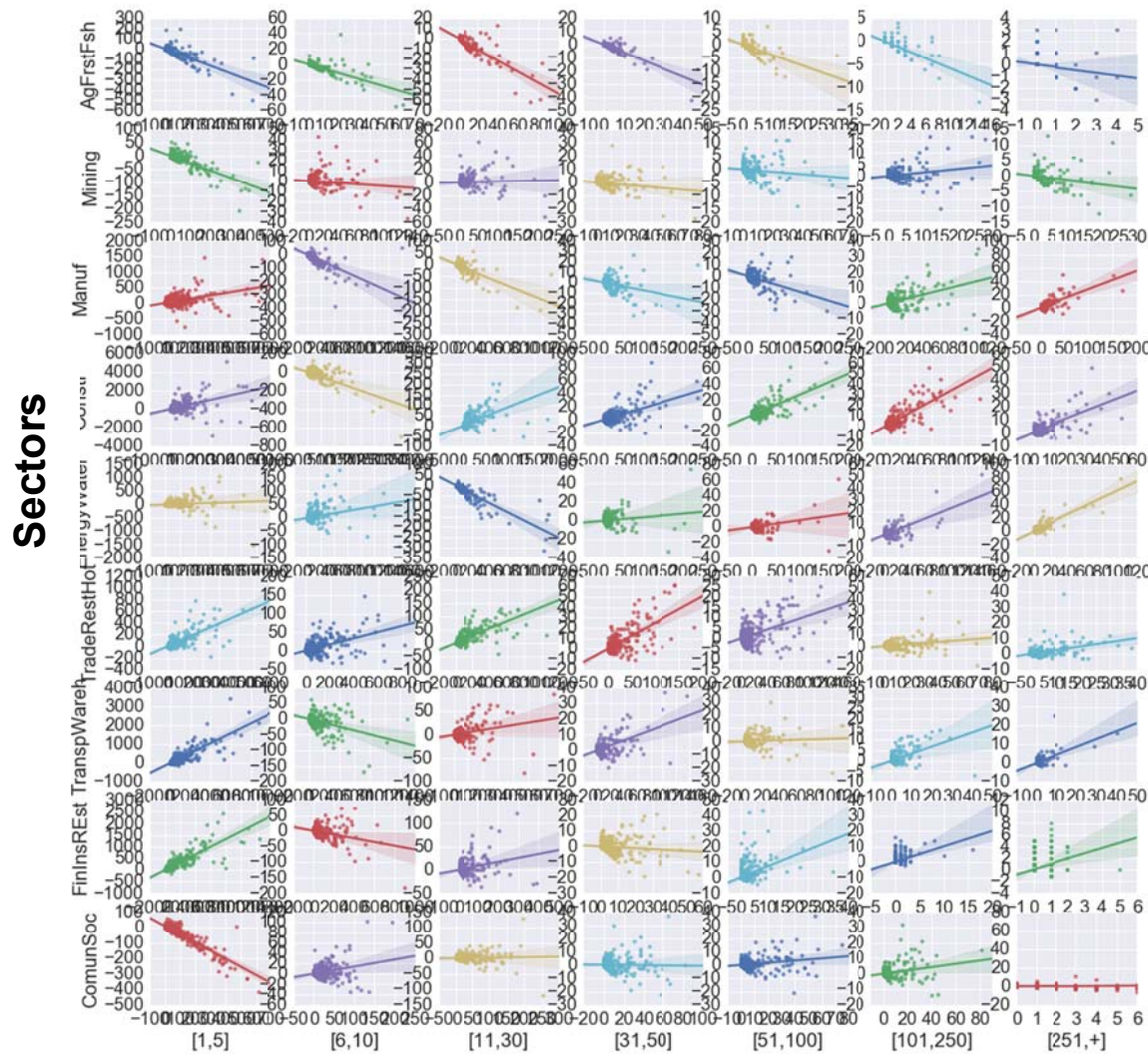
For each production sector 4-9 the number of firms is plotted logarithmically across the population rank.

This grows approximately linearly for many of the employment ranges.

Number of firms grows exponentially on average across the population ranking of Mexican municipalities

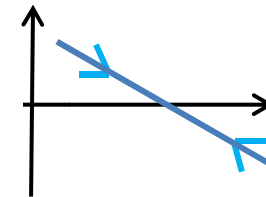
Change in Number of Firms vs Number of Firms by Sector and Employment Level, 2012-2016

Firms in 2012 Vs. Increase in Firms to 2016 Across Sectors and Employment Levels

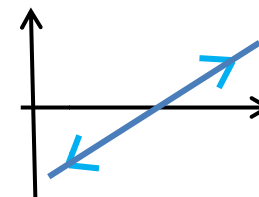


There is a complex pattern of divergence and convergence

Sometimes, the larger the number of firms, the lower the number of new firms. These are convergent dynamics



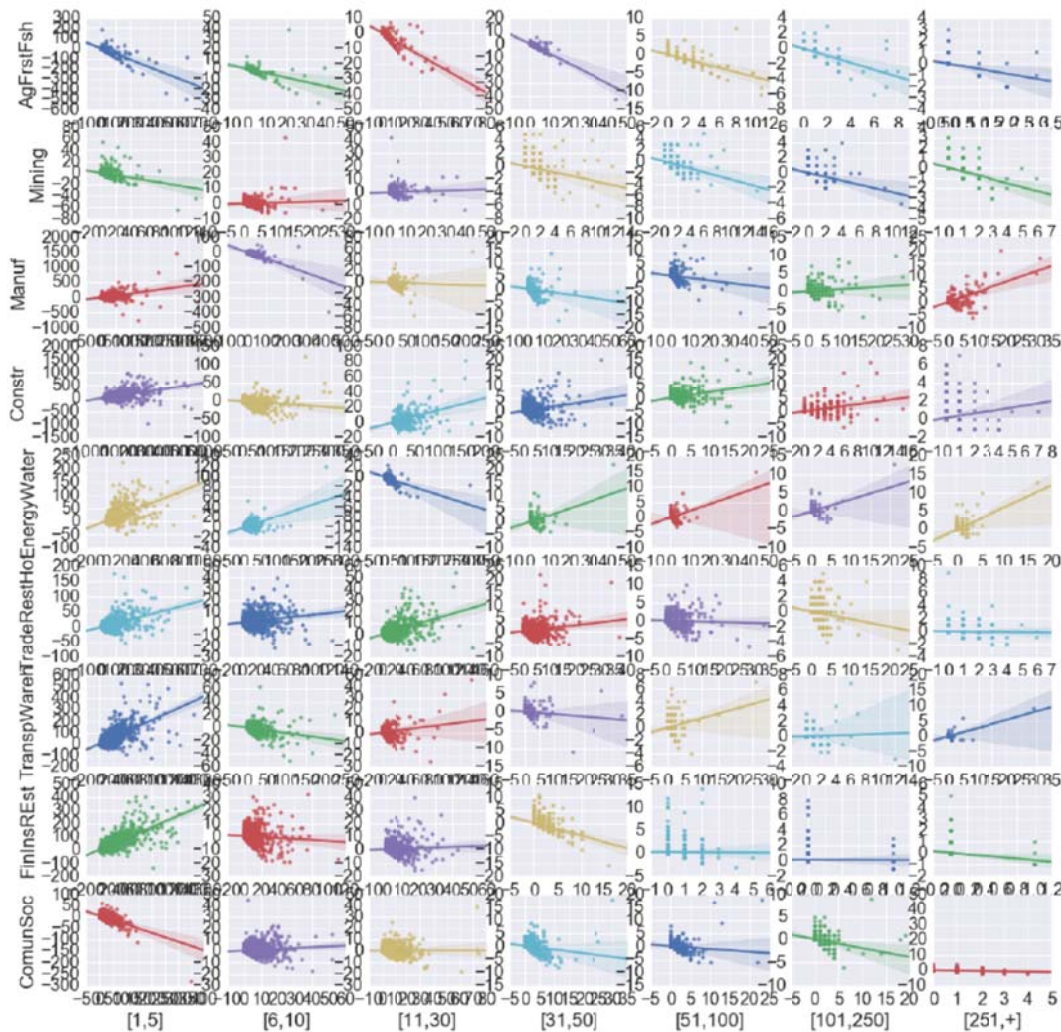
Alternatively, the larger the number of firms, the larger the number of new firms. These are divergent dynamics



Employment Levels

Focusing on 47% of Population in Smaller Municipalities (from the break in the *migration history* graph above down)

Sectors

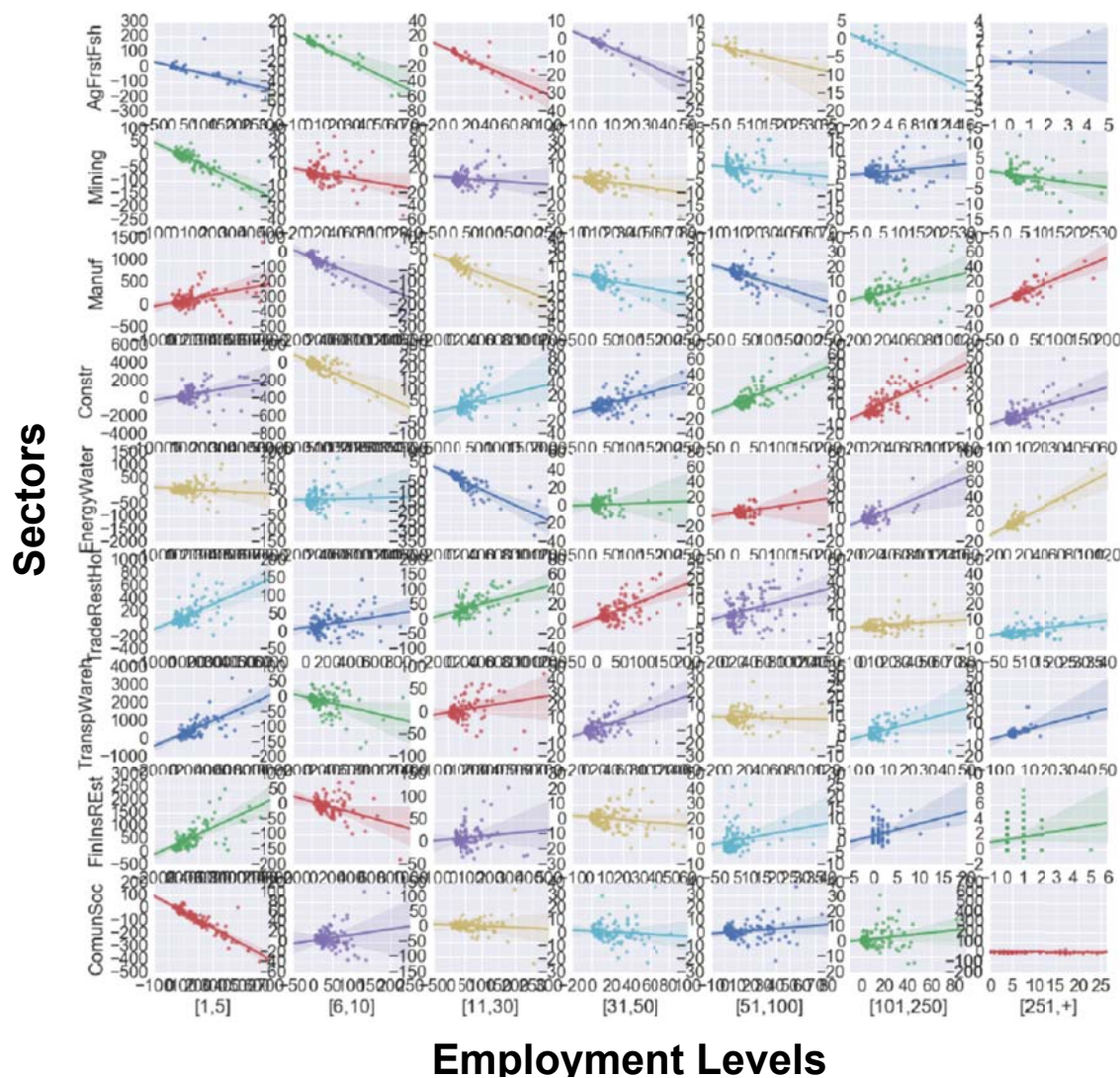


Employment Levels

By pressing PgUp and PgDn these graphs can be compared with the previous one and the following one

In cases of divergence there is usually slower expansion.

Focusing on 53% of Population in Larger Municipalities (from the break in the *migration history* graph above up)



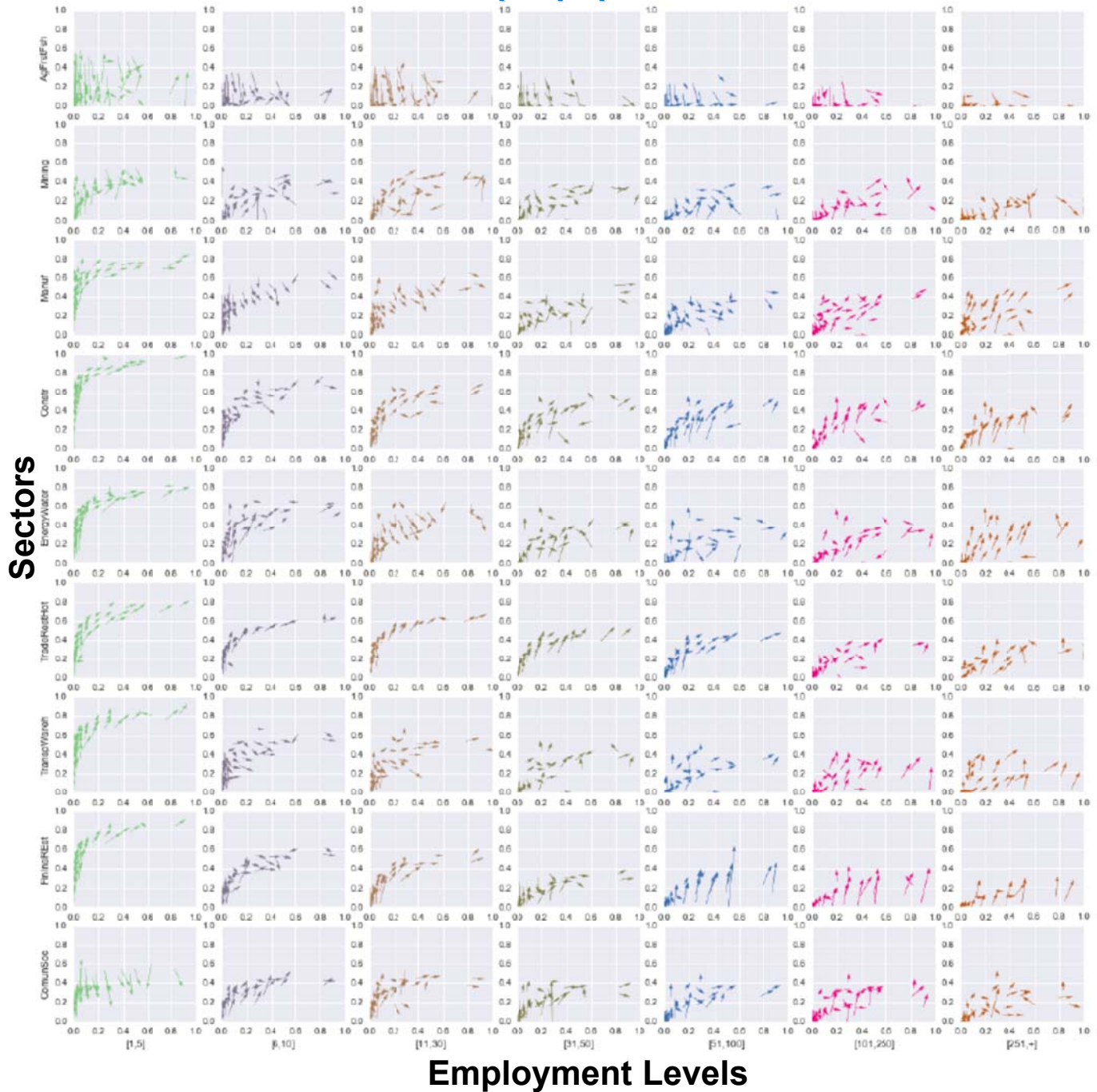
By pressing PgUp and PgDn
these graphs can be
compared with the previous
two

In less populated
municipalities, in cases of
convergence there is usually
faster convergence, while in
cases of divergence there is
usually faster expansion.

Population-Firm Average Phase Space

(by Sectors and Employment Levels across municipalities)

Manufacturing and service firm numbers grow together with municipal population



Each subplot's horizontal and vertical axes are population 2010 and $\log(1 + \text{NumFirms2012})$. Each arrow indicates average municipal rate of change in these variables (to 2015 and 2016) over each cell of a 10x10 grid subdividing each subplot. **Magnify the subplots using PDF capabilities.**