

# BUSINESS CLIMATE INDICATOR IN MANUFACTURING, MEDIUM- AND HIGH-TECH INDUSTRIES IN RUSSIA

Liudmila Kitrar, Tamara Lipkind

## 1. Correlations between BCI components and Industrial Production Index

1. Demand, levels	0.73
2. Demand, changes	0.80
3. External demand, levels	0.73
4. External demand, changes	0.74
5. Output, changes	0.78
6. Business situation, changes	0.82
7. Business situation, expectations	0.79

## 2. The technological distribution of industrial activities

Resource-based (RB)	Low technology (LT)	High and medium technology (MHT)
Food products	Basic metals	Chemicals and chemical products
Beverages	Fabricated metal products	Pharmaceutical products
Tobacco products	Textiles	Computers and electronic products
Wood and related products	Wearing apparel	Electrical equipment
Paper and paper products	Leather and related products	Machinery and equipment
Printing and recorded media	Coke and refined petroleum products	Motor vehicles
Other non-metallic mineral products	Furniture	Other transport equipment

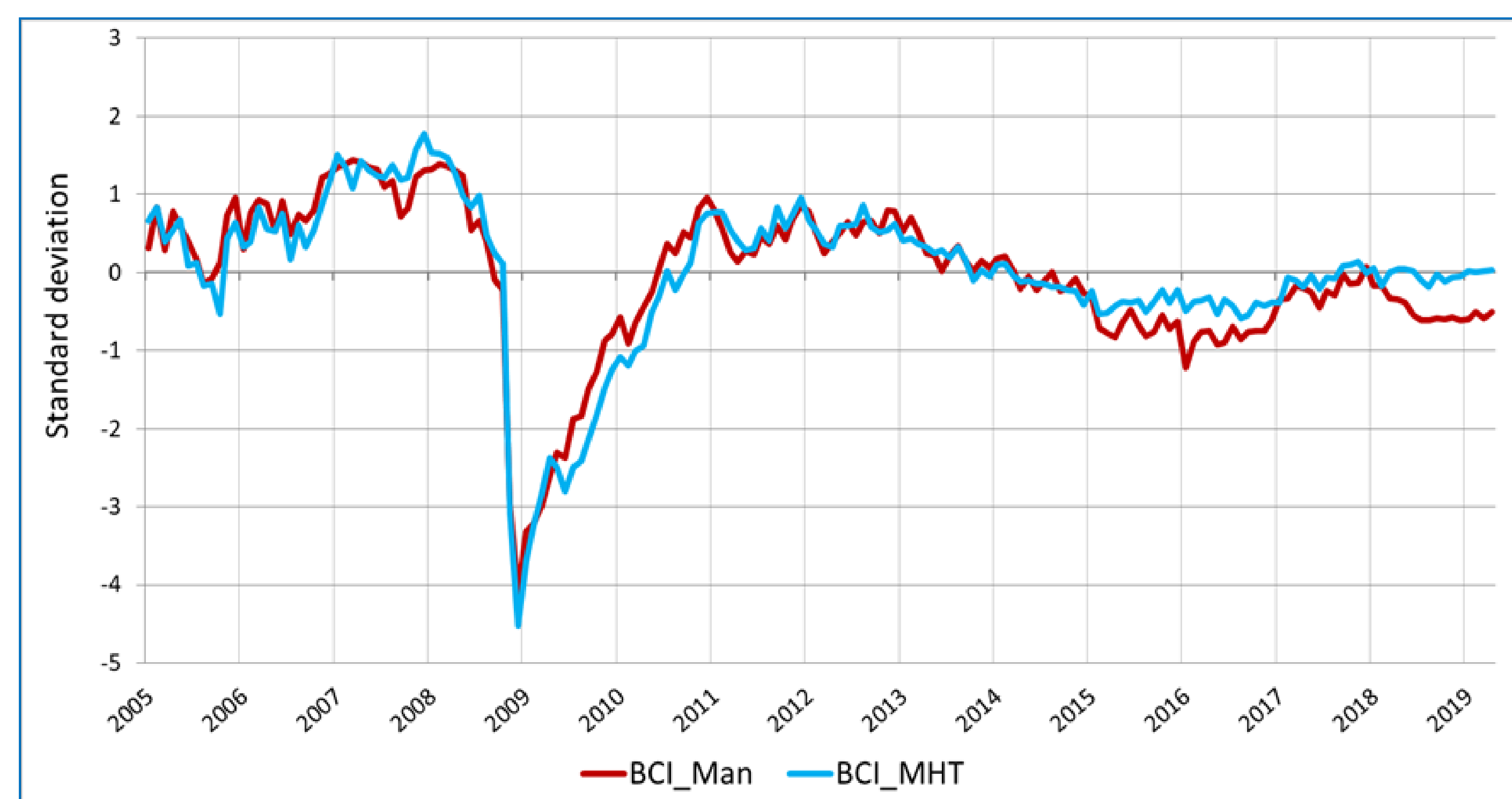
## 3. Principal components extraction: eigenvalues

	1	2	3	4	5	6	7
Manufacturing	5.761	0.497	0.369	0.176	0.113	0.047	0.035
MHT	5.581	0.620	0.361	0.219	0.100	0.076	0.042

## 4. Cross-correlations

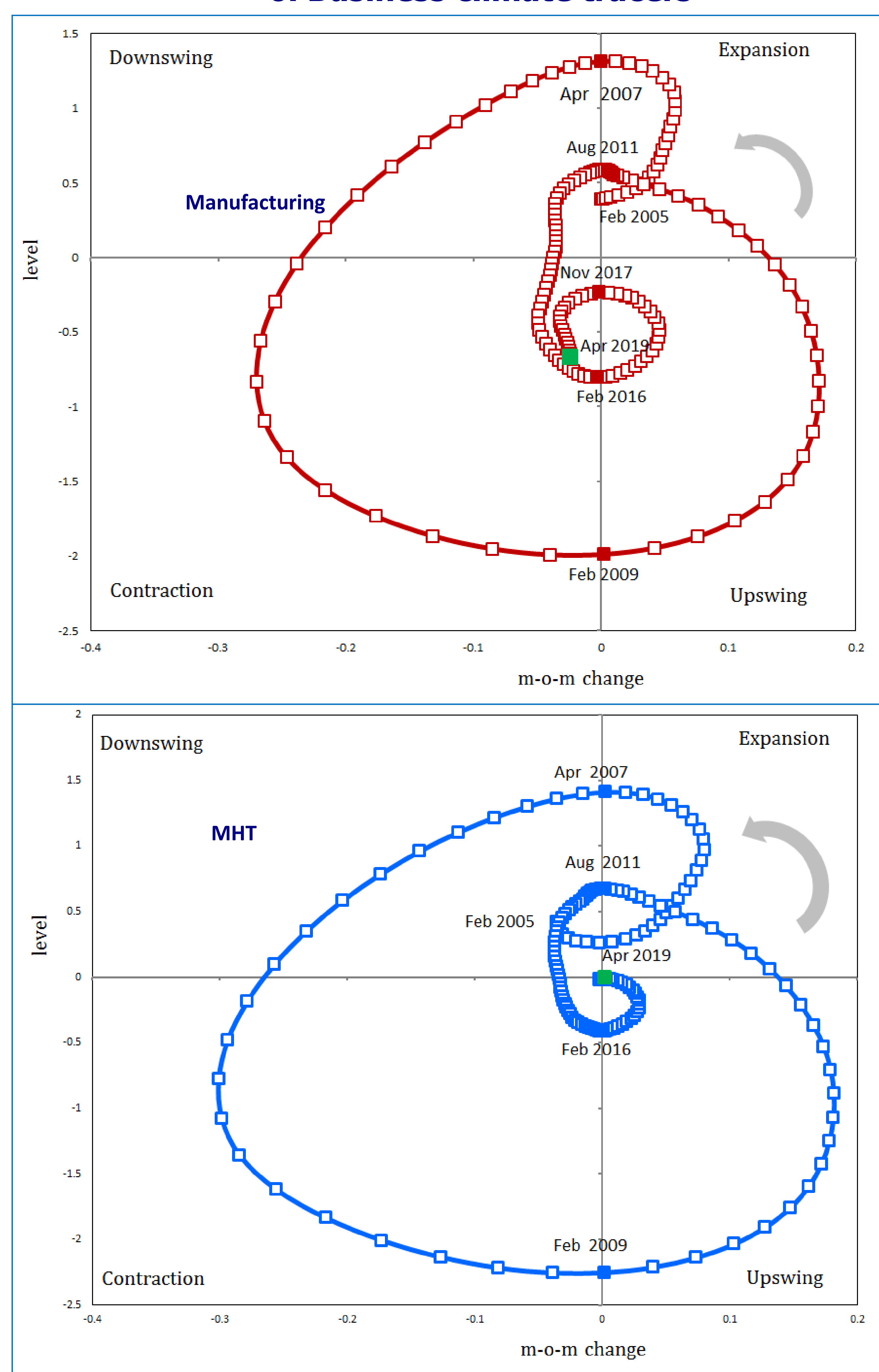
	0	-1
Manufacturing BCI and IPI	0.835	0.808
Manufacturing confidence and IPI	0.724	0.655

## 5. Business climate indicator in manufacturing and MHT



- ◆ BCI reflects quantitative changes in manufacturing growth more accurately and with a lead compared to a confidence indicator
- ◆ During the last protracted recession (2016-2019), the sentiments of manufacturers of medium- and high-tech products were less pessimistic compared to the sentiments of all manufacturers

## 6. Business climate tracers



The HP filter is used to eliminate short-term fluctuations of a period of less than 30 months (parameter  $\lambda = 523.53$ )

The tracers reflect all significant waves of optimism and pessimism of Russian producers