

COINVEST

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Intangible Assets in Bulgaria 1990 - 2005

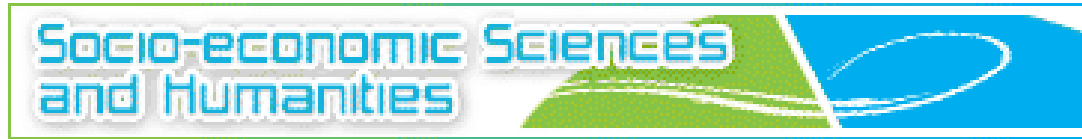
Todor Gradev, Lubomir Dimitrov, Spartak Keremidchiev
Club Economika 2000, Sofia

- Method
- Intangibles by nomenclature



1. Method

- Business statistics data used to capitalize spending on each item.
- Volumes of sales of each industry (e.g., databases) equals volume of purchases of the rest of the economy
- Adjustments made to account for
 - export and import of each category
 - in-house production (own account)
 - missing data in the business statistics



- Source for business statistics: company balance sheets and reports to the National Statistics Institute.
- Source for foreign trade statistics: customs declarations.
- Sources for in-house production (own account): surveys on employment & remunerations by category.
- Sources for missing data: periodic and incidental surveys conducted in some of the years, e.g., on vocational training, advertising expenditures, firm investment in ICT.



NACE industries:

7220 – Software consultancy and supply

7230 – Data processing

7240 – Database activities

7310 – R&D in natural sciences and engineering

7320 – R&D in social sciences and humanities

7420 – Architectural and engineering activities

7440 – Advertising

7413 – Market research

7414 – Business and management consultancy

Not relevant for Bulgaria: Mineral exploration



GDP by ownership type (per cent)

| | public | private | | public | private |
|------|-------------|-------------|------|-------------|-------------|
| 1 | 98.3 | 1.7 | 1998 | 55.8 | 44.2 |
| 2 | 97.0 | 3.0 | 1999 | 49.6 | 50.4 |
| 1993 | 95.1 | 4.9 | 2000 | 25.4 | 74.6 |
| 1994 | 91.3 | 8.7 | 2001 | 22.3 | 77.7 |
| 1995 | 86.5 | 13.5 | 2002 | 18.2 | 81.8 |
| 1996 | 85.5 | 14.5 | 2003 | 12.1 | 87.9 |
| 1997 | 66.4 | 33.6 | 2004 | 11.9 | 88.1 |



NUMBER OF FIRMS

| Year | Manufacturing | Total |
|-------------|----------------------|--------------|
| 1991 | 2,306 | 5,625 |
| 1992 | 2,451 | 8,748 |
| 1993 | 2,802 | 10,767 |
| 1994 | 2,705 | 10,312 |
| 1995 | 4,471 | 18,963 |
| 1996 | 7,053 | 34,434 |
| 1997 | 8,196 | 41,731 |
| 1998 | 8,780 | 49,010 |
| 1999 | 9,811 | 58,059 |
| 2000 | 10,850 | 69,518 |
| 2001 | 12,191 | 76,913 |

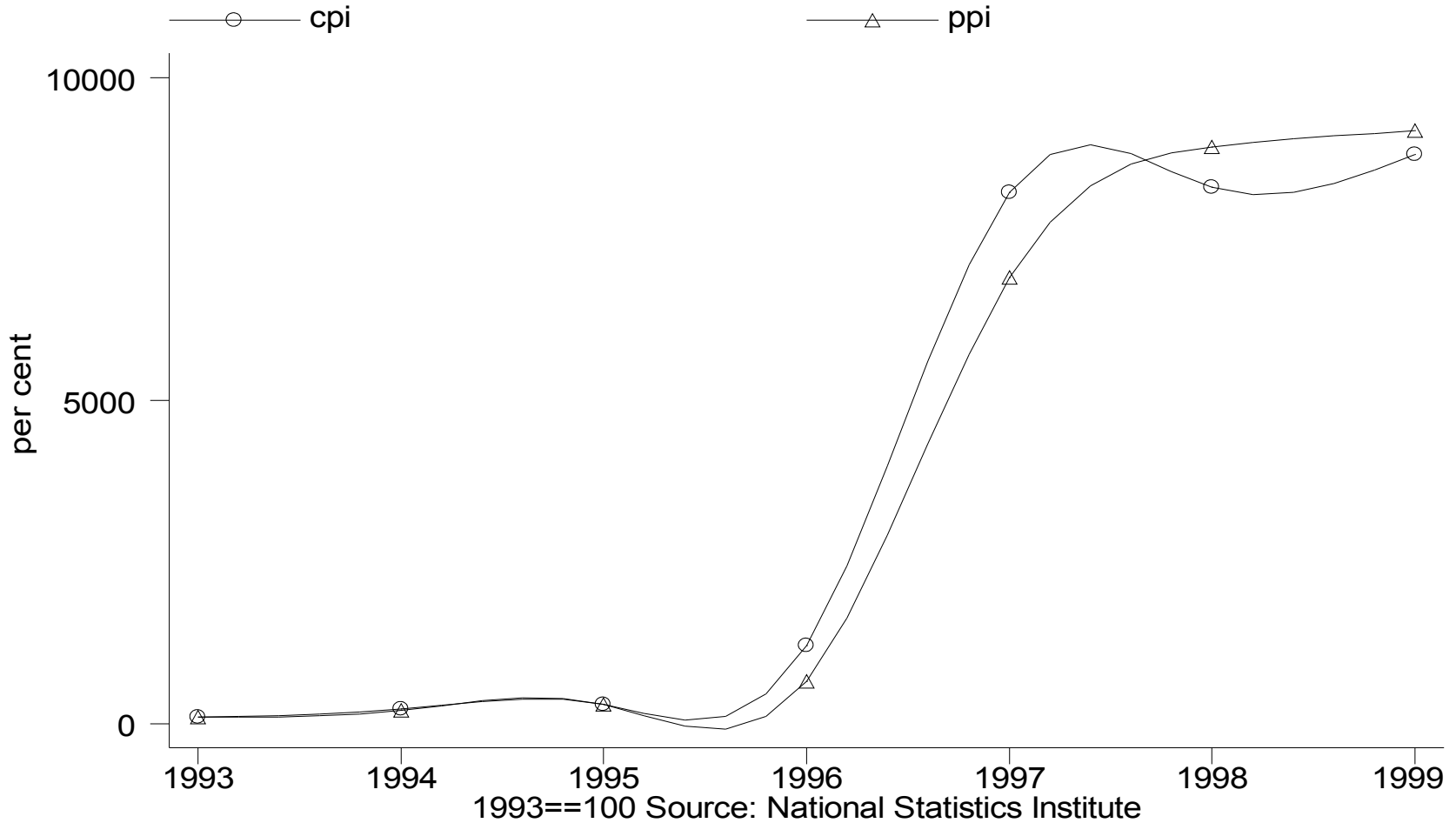


Figure 1. Consumer and Producer Price Indexes



2. Results Software, per cent share of GDP

| | | | |
|------|------|------|------|
| 1991 | 0.02 | 1999 | 0.56 |
| 1992 | 0.10 | 2000 | 2.43 |
| 1993 | 0.07 | 2001 | 2.11 |
| 1994 | 0.07 | 2002 | 0.89 |
| 1995 | 0.23 | 2003 | 0.88 |
| 1996 | 0.29 | 2004 | 1.07 |
| 1997 | 0.34 | 2005 | 1.32 |
| 1998 | 0.37 | 2006 | 1.31 |



2. Results

Databases, per cent share of GDP

| | | | |
|------|-------|------|------|
| 1991 | | 1999 | 0.04 |
| 1992 | | 2000 | 0.02 |
| 1993 | | 2001 | 0.09 |
| 1994 | | 2002 | 0.16 |
| 1995 | 0.004 | 2003 | 0.19 |
| 1996 | 0.006 | 2004 | 0.24 |
| 1997 | 0.009 | 2005 | 0.30 |
| 1998 | 0.002 | 2006 | 0.51 |



2. Results

R & D, per cent share of GDP

| | | | |
|------|------|------|------|
| 1991 | 0.45 | 1999 | 0.57 |
| 1992 | 0.72 | 2000 | 0.52 |
| 1993 | 0.41 | 2001 | 0.47 |
| 1994 | 0.48 | 2002 | 0.49 |
| 1995 | 0.36 | 2003 | 0.50 |
| 1996 | 0.36 | 2004 | 0.49 |
| 1997 | 0.51 | 2005 | 0.48 |
| 1998 | 0.57 | 2006 | 0.48 |



2. Results Copyright & Licenses, % share of GDP

| | | | |
|------|------|------|------|
| 1991 | | 1999 | 0.16 |
| 1992 | 0.03 | 2000 | 0.52 |
| 1993 | 0.18 | 2001 | 1.04 |
| 1994 | 0.07 | 2002 | 0.34 |
| 1995 | 0.13 | 2003 | 1.05 |
| 1996 | 0.08 | 2004 | 0.62 |
| 1997 | 0.11 | 2005 | 1.08 |
| 1998 | 0.73 | 2006 | 0.96 |



2. Results

New products in Finance, % share of GDP

| | | | |
|------|------|------|------|
| 1991 | 0.78 | 1999 | 0.16 |
| 1992 | 0.28 | 2000 | 0.52 |
| 1993 | 0.39 | 2001 | 1.04 |
| 1994 | 0.47 | 2002 | 0.93 |
| 1995 | 0.56 | 2003 | 1.06 |
| 1996 | 0.55 | 2004 | 1.01 |
| 1997 | 0.34 | 2005 | 1.08 |
| 1998 | 0.29 | 2006 | 1.16 |



2. Results

Architectural & Engineering Design, % of GDP

| | | | |
|------|------|------|------|
| 1991 | 0.16 | 1999 | 0.37 |
| 1992 | 0.19 | 2000 | 0.96 |
| 1993 | 0.26 | 2001 | 0.55 |
| 1994 | 1.13 | 2002 | 0.51 |
| 1995 | 0.19 | 2003 | 0.58 |
| 1996 | 0.20 | 2004 | 0.56 |
| 1997 | 0.31 | 2005 | 0.57 |
| 1998 | 0.30 | 2006 | 0.68 |



2. Results

Brand equity, advertisement, % of GDP

| | | | |
|------|------|------|------|
| 1991 | | 1999 | 0.65 |
| 1992 | | 2000 | 0.61 |
| 1993 | | 2001 | 0.71 |
| 1994 | | 2002 | 0.91 |
| 1995 | 0.12 | 2003 | 0.82 |
| 1996 | 0.21 | 2004 | 0.89 |
| 1997 | 0.19 | 2005 | 0.96 |
| 1998 | 0.41 | 2006 | 0.94 |



2. Results

Brand equity, market research, % of GDP

| | | | |
|------|------|------|------|
| 1991 | | 1999 | 0.24 |
| 1992 | | 2000 | 0.35 |
| 1993 | | 2001 | 0.35 |
| 1994 | | 2002 | 0.36 |
| 1995 | 0.08 | 2003 | 0.34 |
| 1996 | 0.31 | 2004 | 0.34 |
| 1997 | 0.65 | 2005 | 0.29 |
| 1998 | 0.24 | 2006 | 0.31 |



2. Results

Firm-specific Human capital % of GDP

(vocational training survey)

| | | |
|------|------|------|
| 1991 | 1999 | |
| 1992 | 2000 | 0.52 |
| 1993 | 2001 | |
| 1994 | 2002 | 0.58 |
| 1995 | 2003 | |
| 1996 | 2004 | 0.68 |
| 1997 | 2005 | |
| 1998 | 2006 | 0.72 |



2. Results

Organizational structure – purchased, % of GDP

| | | | |
|------|------|------|------|
| 1991 | | 1999 | 0.15 |
| 1992 | | 2000 | 0.28 |
| 1993 | | 2001 | 0.35 |
| 1994 | | 2002 | 0.37 |
| 1995 | 0.05 | 2003 | 0.47 |
| 1996 | 0.06 | 2004 | 0.51 |
| 1997 | 0.33 | 2005 | 0.62 |
| 1998 | 0.34 | 2006 | 0.56 |



2. Results

Organizational structure – own account, % of GDP

| | | | |
|------|------|------|------|
| 1991 | | 1999 | 0.86 |
| 1992 | | 2000 | 1.10 |
| 1993 | | 2001 | 0.97 |
| 1994 | | 2002 | 0.98 |
| 1995 | 0.05 | 2003 | 0.98 |
| 1996 | 0.06 | 2004 | 0.90 |
| 1997 | 0.33 | 2005 | 0.86 |
| 1998 | 0.13 | 2006 | 0.85 |



Summing up:

Intangibles are growing in Bulgaria, particularly so:

- from the beginning of the 1990s, as the economy gradually switched from manufacturing to services dominated
- from the mid-1990s, as the economy became more private ownership dominated
- from the early 2000's, as the economy became more FDI dominated