

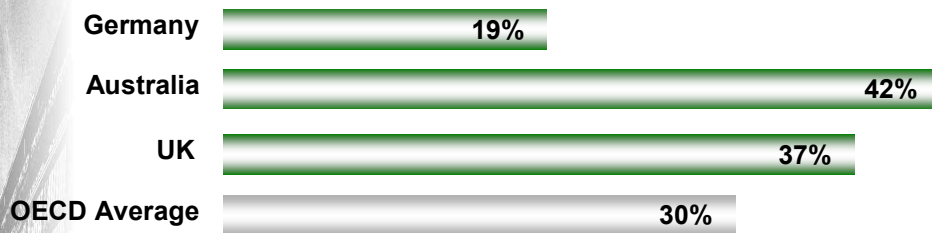
# Gerhard Bosch VOCATIONAL TRAINING IN GERMANY

A Comparative Perspective  
on Vocational Training in Ten Countries:  
Systems, Innovations and Results  
International Seminar

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## 1.1 Graduates from Tertiary Education 2000



### Growth Rates 1990-2000



## 1.2 Vocational Training

- **60%** of young age cohorts receive certificates from vocational training
  - ➔  $\frac{3}{4}$  from the **dual system**
  - ➔  $\frac{1}{4}$  from school based training
- **High reputation** of vocational training
  - ➔ Employers and unions support the system
  - ➔ Access to good jobs
  - ➔ Possibilities to continue training (master, technician, Fachwirt) (11% of German workforce)
  - ➔ Career possibilities (supervisors, middle managers, specialists, self-employment)

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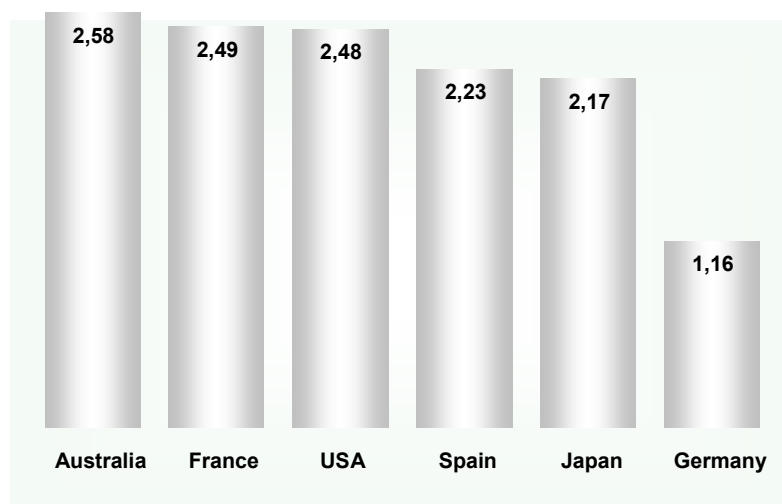
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## 1.3 Youth unemployment

Unemployment rates among young people aged 15-24 relative to general unemployment rate of people aged 25-54, in selected OECD Countries



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Source: Employment Outlook 2004, own calculations

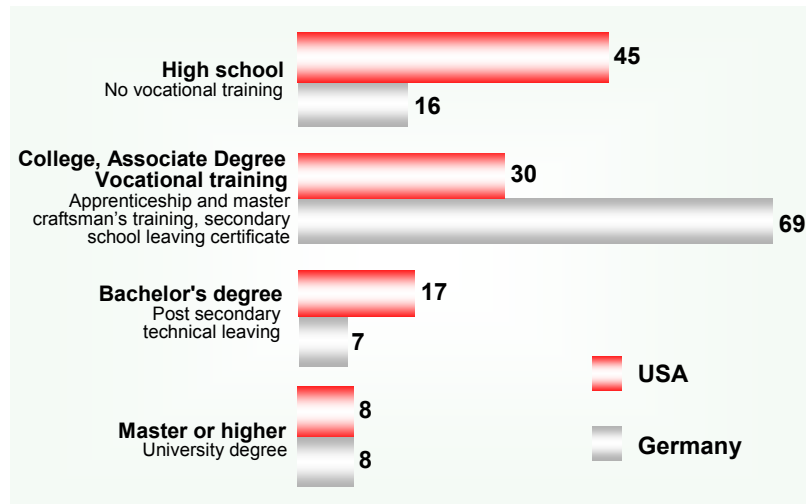
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## 1.4 Qualification level

Qualification level in West Germany and the USA, 1989  
% share of all employees



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Source: Freemann / Schettkat, 1998

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## 1.5 Crisis of Dual System

- ➔ Erosion of occupational labour markets
  - Decreasing demand for occupational skills
  - Adjustment to new technologies too slow
  - Increasing turbulences on the labour market
- ➔ More demand for tertiary education
- ➔ Decreasing willingness of firms to provide training

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## 2.1 Structure of the „Dual System“

- ➔ Apprenticeship-Contract with a firm
- ➔ Duality:           3 days in the firms,  
                          2 days in vocational schools
- ➔ Social partners develop occupations with help from the Federal Institute of Vocational Training (occupational title, duration, training program, examination procedures)
- ➔ 350 national occupations – cannot be split up in modules
- ➔ Control and supervision – decentralized – regional chambers

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## 2.2 Differentiation with the Dual System

- Dual system builds on a highly differentiated school system
- Different schools certificates lead into different occupations
  - ➔ Those with lower secondary school certificate tend to go into handicraft occupations
  - ➔ Those with *Abitur* tend to go in bank or IT occupations

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## 2.3 Costs of Training



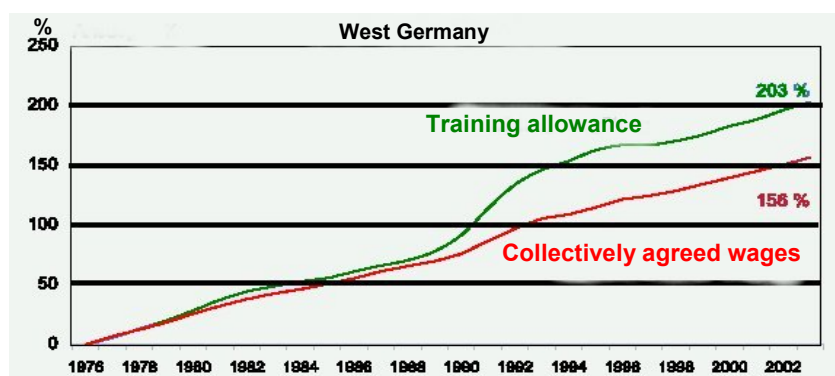
### → Costs are shared between the state, employers and apprentices

- Allowances of apprentices:  
617 € *West*, 526 € *East Germany* per month  
1/3 of average wage of skilled workers
- Companies: gross costs 10 178€ per year  
net costs 2 244 € per year
- State: vocational schools, subsidies to apprentices with low allowances, grants and loans for master courses

## 2.4 Increases in training allowances



Development of training allowances in comparisons to collectively agreed wages 1996 - 2003



Source: Wößmann 2004: 21

## 2.5 Returns of training for firms



### Returns of potential training



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Source: Walden, Beicht, Herget, 2002: 38

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## 3.1 Supply of apprenticeship-contract



→ Percentage of firms providing training **fell** from 34,5% in 1985 → to 24,3% in 2002

→ **Reasons:**

- Structural changes (deregulation of product markets, declining political pressure, weakening of collective bargaining, costs of training too high)
- Economic cycle
- German unification

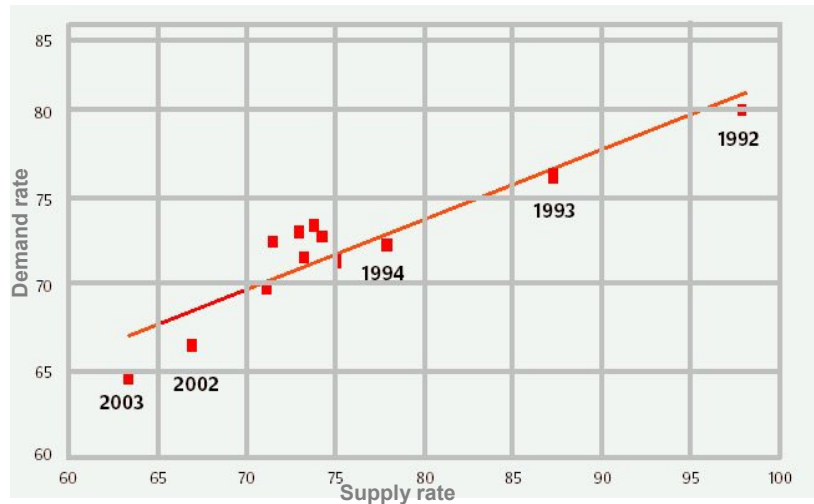
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### 3.2 Relation between demand and supply



The relation between demand and supply for apprenticeships between 1992-2003 in West Germany



Demand and supply in relation to school leavers

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Source: BMBWF 2004a: 67

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### 3.3 Approaches to increase supply



- Levy system
- Voluntary training pacts at federal, regional and local level
- Collective agreements

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### 3.4 Quantitative adjustment: firms' willingness to provide training



#### Apprenticeship promotion

**In 80 collective agreement areas covering 50 industries and 12,4 millions employees there are agreements with the following provisions:**

- No increase in training allowance combined with increase in number of apprenticeship places
- No reduction in the number of training places (ranging from declarations of intent to binding pledges)
- Creation of new apprenticeship places, in some cases with concrete figures and monitoring procedures
- Lower starting rates of pay for young people after apprenticeship

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Source: WSI Tarifarchiv

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### 4.1 Modernization of occupations



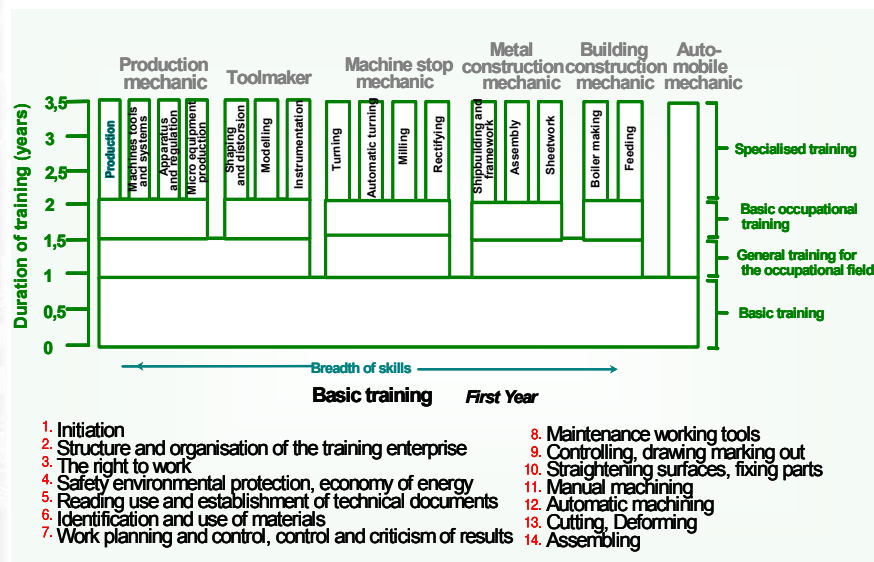
- ➔ In 1970's most training ordonnances dated back to the 30's
- ➔ First wave of new ordonnances until 1995
  - Combination of overlapping occupations
  - Common basic training
  - New technologies included

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## 4.2 Reorganization of training for metallurgical trades



Source: A. Hege, 1995, Apprenticeship and entry into working life in the Federal Republic of Germany. La Revue de L'IRE, Paris

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## 4.3 Second wave of new ordonnances 1995- 2005

- ➔ 1995 social partners agreed on a accelerated procedure of issuing new ordonnances (1 year modernization, 2 year creation of new occupations)
- ➔ Since 1996 **64 new** occupations, **190** occupations **modernized**
- ➔ Early diagnosis system established (job advertisement, further training, innovative firms)

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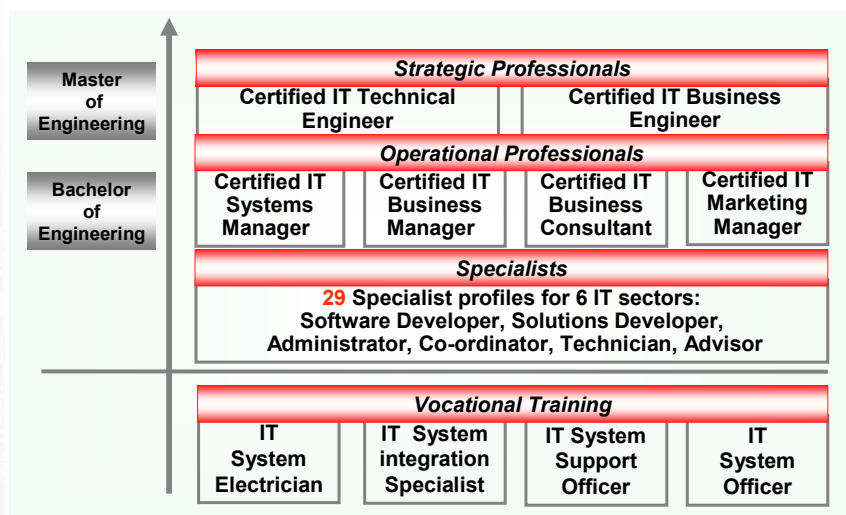
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#### 4.4 New elements of modernization

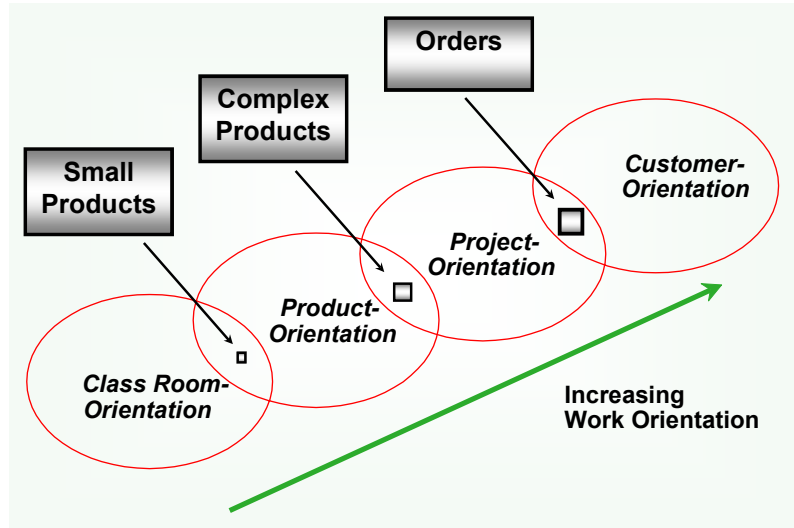
- Customer-orientation (combination of technical, commercial and social competences)
- New teaching methods and examination procedures
- Optional modules
- Permeability to tertiary education



#### 4.5 Training Pathways in IT-Occupations



#### 4.6 Basic learning forms in vocational training

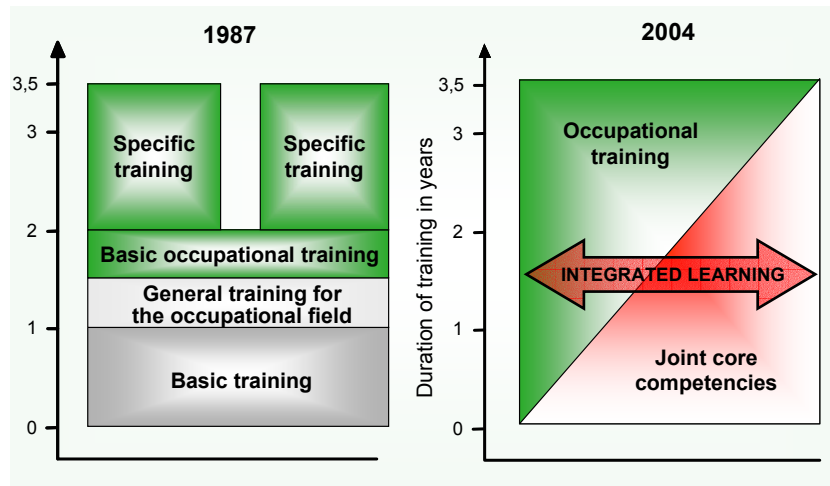


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Source: Bosch 2000a

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#### 4.7 Comparison of training curricula in the metallurgic trades 1987 and 2004



Source: Verband der Metall- und Elektroindustrie Baden-Württemberg e.V. (2005):  
Information zu den neuen Metallberufen 2004: 4

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## 5.1 Are occupational labour markets eroding?



- **Job tenure has not decreased** – it increased for skilled workers (average tenure is around 10 years)
- **Less changes of occupations** than in 70's because
  - ➔ occupations became broader and new occupations have been developed
  - ➔ increased demand for general skills did not replace demand for occupational skills
  - ➔ occupational profiles reflect modern work organization

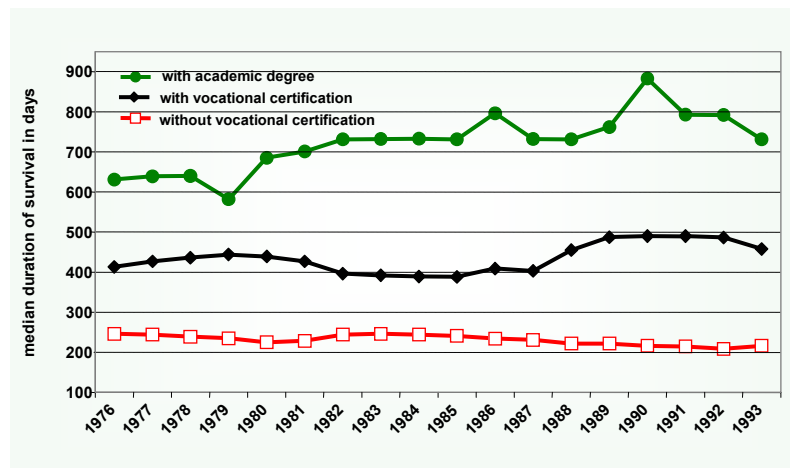
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## 5.2 Are occupational labor markets in Germany eroding?



Median duration of survival in newly entered jobs by level of vocational qualification, West Germany, entry years 1976-1993

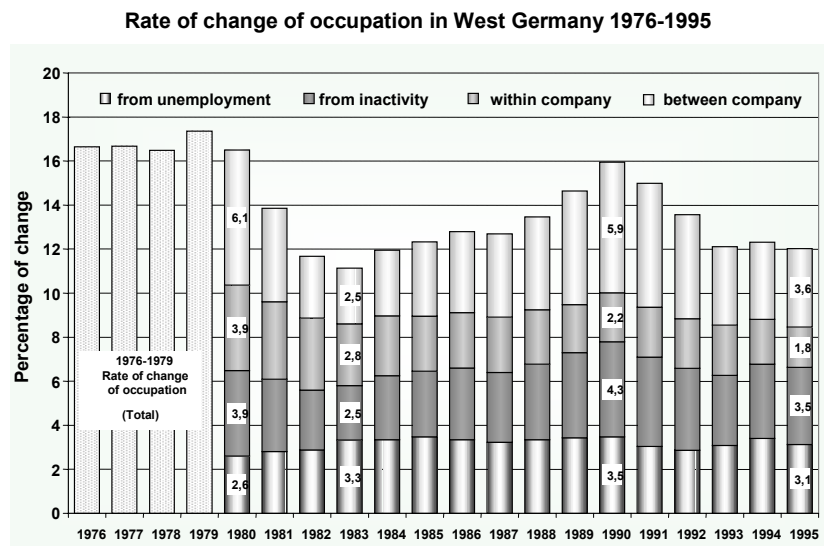


Source: Erlinghagen 2004: 53 (data: IAB Employment Subsample 1975-1995)

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### 5.3 Are occupational labor markets in Germany eroding?



Source: Erlinghagen M. (2002), Die sozioökonomischen Determinanten von Arbeitsmarktmobilität und Beschäftigungsstabilität im Zeitverlauf, Manuscript Juni, IAT

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### 6 Challenges



- **Bologna Process: Introduction of master and bachelor degrees**
  - ➔ Competition between bachelors and masters/technicians
  - ➔ Vocational training might become terminal
- **Possible solutions:**
  - ➔ Links between Bologna and *Kopenhagen-Brugge-process* by recognizing credit points from vocational training in tertiary education
  - ➔ Creation of formal pathways from vocational training to tertiary education
  - ➔ Extension of the Dual System to the bachelor level

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