

Discussion of: The Quiet Revolution and the Decline of Routine Jobs

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Paper in One Slide - Basic Idea and Main Results

- ▶ Research question: how much of the decline of routine employment (1970–2000) is due to changes in female labor supply vs. technology?
 - ▶ The Quiet Revolution (QR): women's life-cycle labor supply shifted from intermittent to continuous (Goldin, 2006)
 - ▶ Extends Hsieh et al. (2019) with occupation-specific human capital dynamics
 - ▶ Two novel ingredients: (i) life-cycle female LFP varies with child-rearing; (ii) occupations differ in skill dynamics (γ , δ , ϕ)
- ▶ Main results:
 - ▶ QR explains 12–22% of the aggregate decline in routine employment share
 - ▶ Technology (falling p_C) is the dominant force for aggregate trends in GE
 - ▶ QR essential for the *gender incidence*: explains 58% of rise in female abstract share, 29% of rise in female LFP
 - ▶ QR also contributes to productivity growth: 23% of output per capita increase

Strong Suits and Main Contributions

- ▶ Strong Suits:
 - ▶ Bridges two major literatures: routine-biased tech. change + secular change in women's LFP
 - ▶ Well-grounded on empirics: four descriptive facts tightly guide the model
 - ▶ Nuanced accounting: technology dominates aggregate trends, QR dominates gender composition
- ▶ Main Contributions:
 - ▶ Disentangles labor supply (QR) vs. labor demand (tech) for the decline of routine jobs
 - ▶ Theoretical formalization: intermittency \times occupation-specific skill dynamics \rightarrow women sort away from dynamic (abstract) jobs (Proposition 2; cf. [Polachek, 1981](#))
 - ▶ QR operates via partly offsetting channels: sorting ($R \rightarrow A$) vs. continuity (\uparrow female share in labor force, disproportionately in R)

Main Figure (s):

- ▶ Partial equilibrium: the QR alone explains $\sim 86\%$ of the decline in female routine employment and $\sim 85\%$ of the rise in female abstract employment

Figure 9: Change in Routine Emp. Share

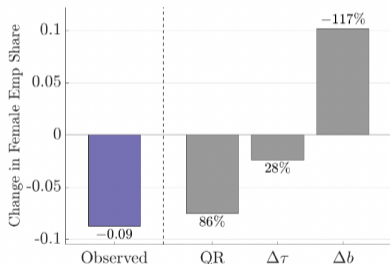
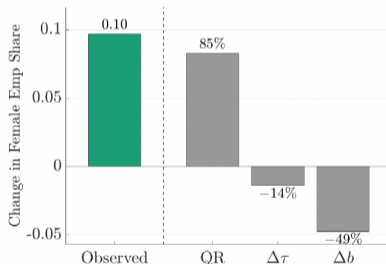


Figure 10: Change in Abstract Emp. Share



Notes: These figures show the change in the female routine and abstract employment share between 1970 and 2000 (leftmost colored bars). The gray bars show the counterfactual change in the employment shares, if only one set of parameters changed from the 1970 to 2000 values, with all other parameters remaining at the 1970 values. The percents displayed on top of each bar indicate the percent of the total observed change generated under that counterfactual.

Discussion of the Paper: Major and Minor Points

- ▶ Major discussion points:
 - ▶ Steady-state comparison without transitional dynamics
 - ▶ Modeling intermittency as exogenous and uniform across occupations
 - ▶ Role and interpretation of the non-monetary preference parameters (b)
 - ▶ Exogenous skill depreciation rates from German data
- ▶ Minor discussion points:
 - ▶ Related literature on childcare costs and family policies
 - ▶ Post-2000 trends and the AI era

Major Points - First Batch

- ▶ Steady-state comparison (1970 vs. 2000):
 - ▶ Usual critique: comparing steady states masks transitional dynamics and adjustment costs
 - ▶ Why matter here? the QR *is* a transition - happens cohort by cohort gradually
 - ▶ Women born 1945 vs. 1955 vs. 1965 faced different ρ 's simultaneously
 - ▶ Feasible: [Cavalcanti et al. \(2026\)](#) solve a similar HHJK-based model decade-by-decade (1960–2020), tracing the gradual evolution of occupation-specific barriers
- ▶ Exogenous and uniform ρ across occupations:
 - ▶ Core assumption: all women face the same probability of labor force exit during child-rearing, regardless of occupation
 - ▶ If abstract occupations offer higher returns to continuity, shouldn't women in abstract jobs select *into* staying? Endogenous $\rho(j)$ matters for the mechanism
 - ▶ [Adda, Dustmann, and Stevens \(2017\)](#): fertility timing and occupation are jointly determined
 - ▶ [Cavalcanti et al. \(2026\)](#): child penalties (τ_i^n) vary hugely across occupations — engineers saw $\sim 90\%$ decline vs. 41% for food-prep. The QR was not uniform across occupations

Major Points - Second Batch

- ▶ Role of the preference parameters b :
 - ▶ The b 's are residual — they absorb whatever the economic forces cannot explain about employment shares
 - ▶ Between 1970 and 2000, b for routine work *rises* to offset falling routine wages → “barriers to reallocation”
 - ▶ This is a large residual: Δb alone would have *increased* routine employment (Figures 9–10, –117% and –49%)
 - ▶ Hard to interpret: could you discipline b with external data? e.g., geographic mobility costs, occupational licensing
- ▶ Role of skill depreciation δ :
 - ▶ Key parameters ($\delta_M = 0.32$, $\delta_R = 0.05$, $\delta_A = 0.54$) taken from German women's panel data ([Adda et al., 2017](#))
 - ▶ German institutions differ substantially from U.S.; e.g., strong job protection, long parental leave
 - ▶ The mechanism relies on the *net* effect of three opposing skill-dynamic forces (γ , δ , ϕ) — $\delta_A > \delta_R$ pushes *against* the main result, while $\gamma_A > \gamma_R$ and $\phi_A > \phi_R$ push *for* it

Minor Points

- ▶ Childcare costs, fertility, and family policies:
 - ▶ The QR is modeled as a reduced-form shift in ρ : social norms, birth control, childcare
 - ▶ But childcare costs are a concrete, policy-relevant lever: [Attanasio, Low, and Sánchez-Marcos \(2008\)](#); [Greenwood, Seshadri, and Yorukoglu \(2005\)](#); [Wang \(2026\)](#)
 - ▶ Missing feedback: women don't just passively face intermittency — they *choose* fertility in response to occupational incentives. Reduced-form ρ may miss this loop
- ▶ Post-2000 and looking forward:
 - ▶ The QR is largely “complete” by 2000 (ρ falls from 0.50 to 0.20), yet routine employment keeps declining
 - ▶ Suggests technology increasingly dominates after 2000 — consistent with the paper's message
 - ▶ Natural extension: AI as the next wave, now substituting for *abstract* tasks — does the logic reverse?
 - ▶ [Cortés et al. \(2024\)](#): automation and gender implications for occupational segregation

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