

# Partnership Transitions and Mothers' Employment

Department for Work and Pensions

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Gillian Paull

The Institute for Fiscal Studies

## Partnership Transitions and Mothers' Employment

When mothers separate from a partner or begin living with a new partner:

- are they especially likely to leave formal employment or to begin working ?
- are there adjustments in their work characteristics if they remain working through the partnership change ?

Use longitudinal (panel) data for a large sample of mothers from:

- the first thirteen waves of the British Household Panel Survey (1991 to 2003)
- waves three to seven of the Families and Children Study (2001 to 2005)

Four parts to this presentation:

(1) Partnership and work patterns over the period of motherhood

(2) Changes in work participation around partnership transitions

(3) Changes in work characteristics around partnership transitions

(4) Comparisons with childless adults and fathers

A few definitions:

- being partnered is defined as living in the same household as a partner either married or cohabiting
- partnership transitions consist of movements between being partnered and being single (including separations and unions)
- ignores partner-to-partner changes
  
- work participation is defined as being in formal paid work
- work transitions are movements between working and not working (including work entries and work exits)
- ignores to job-to-job moves

## (1) Partnership and Work Patterns over the Period of Motherhood

Consider:

- Partnership histories and work participation for twenty years following the first birth.
- The numbers of partnership and work transitions in 5-year segments.
- Sequences of partnership and work transitions which lie within 12 months of each other.

## Main Findings

- ❖ The percentage of mothers with a partner declines steadily from 90 percent at the time of first birth to 80 percent 20 years later. But only 65 percent of mothers remain partnered over the period and very few mothers are single throughout the 20 years.
- ❖ Mothers with partners (single mothers) who have previously been single mothers (mothers with partners) are less (more) likely to be in work than mothers who have always had a partner (always been single).
- ❖ Within five-year segments, 46 percent of mothers never make a partnership or work transition. There is a slight tendency for those with more partnership transitions to have more work transitions.

- ❖ Most transitions (partnership and work) occur in isolation from any other transition, that is, no other transition occurs within 12 months.
- ❖ When partnership and work transitions occur close together, the initial transition is almost equally likely to be of either kind.

Figure 4.1. Percentage of Mothers With Partners By Months Since First Birth

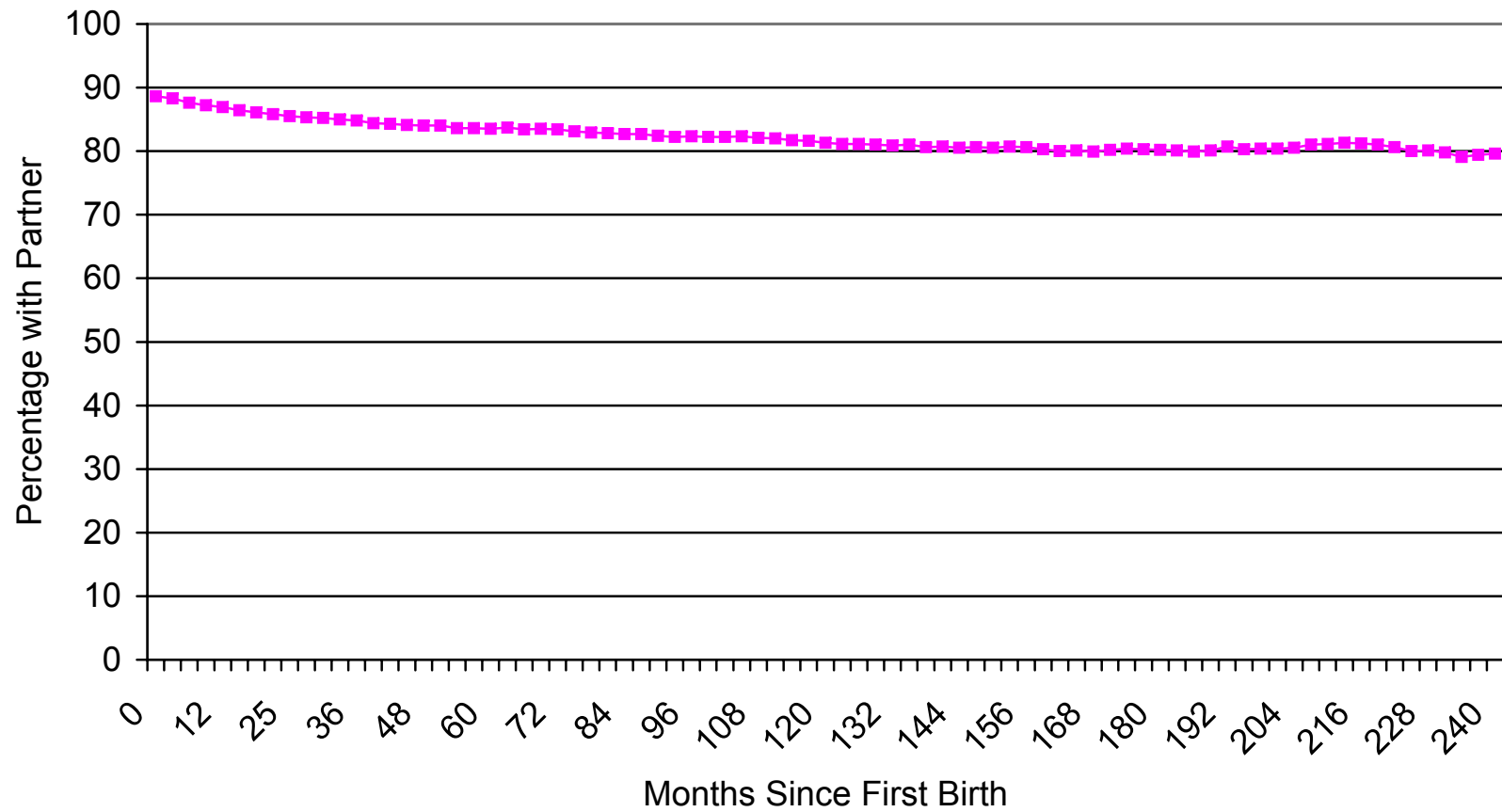




Figure 4.2: Partnership History By Months Since First Birth

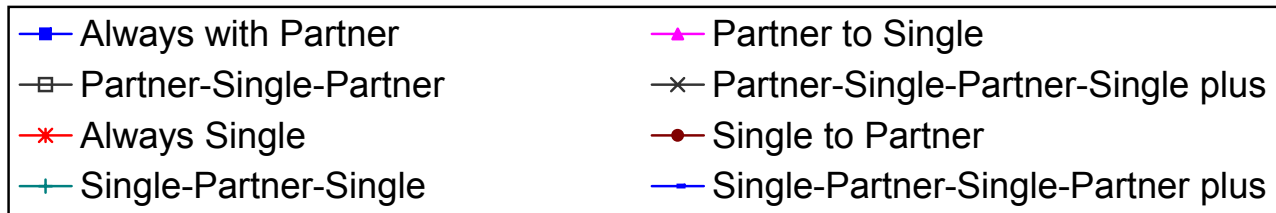
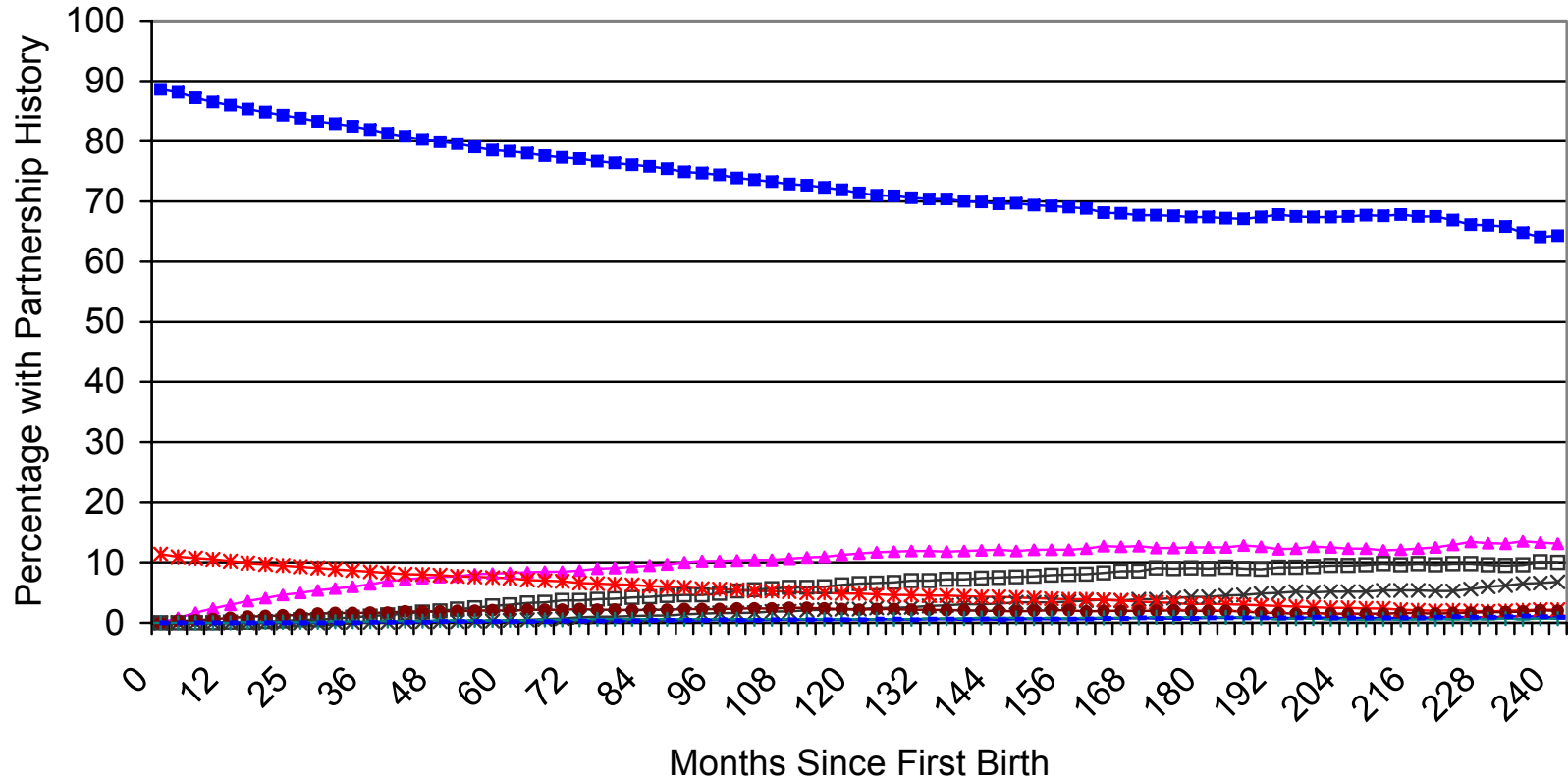


Figure 4.3. Percentage of Mothers in Work By Current Partnership

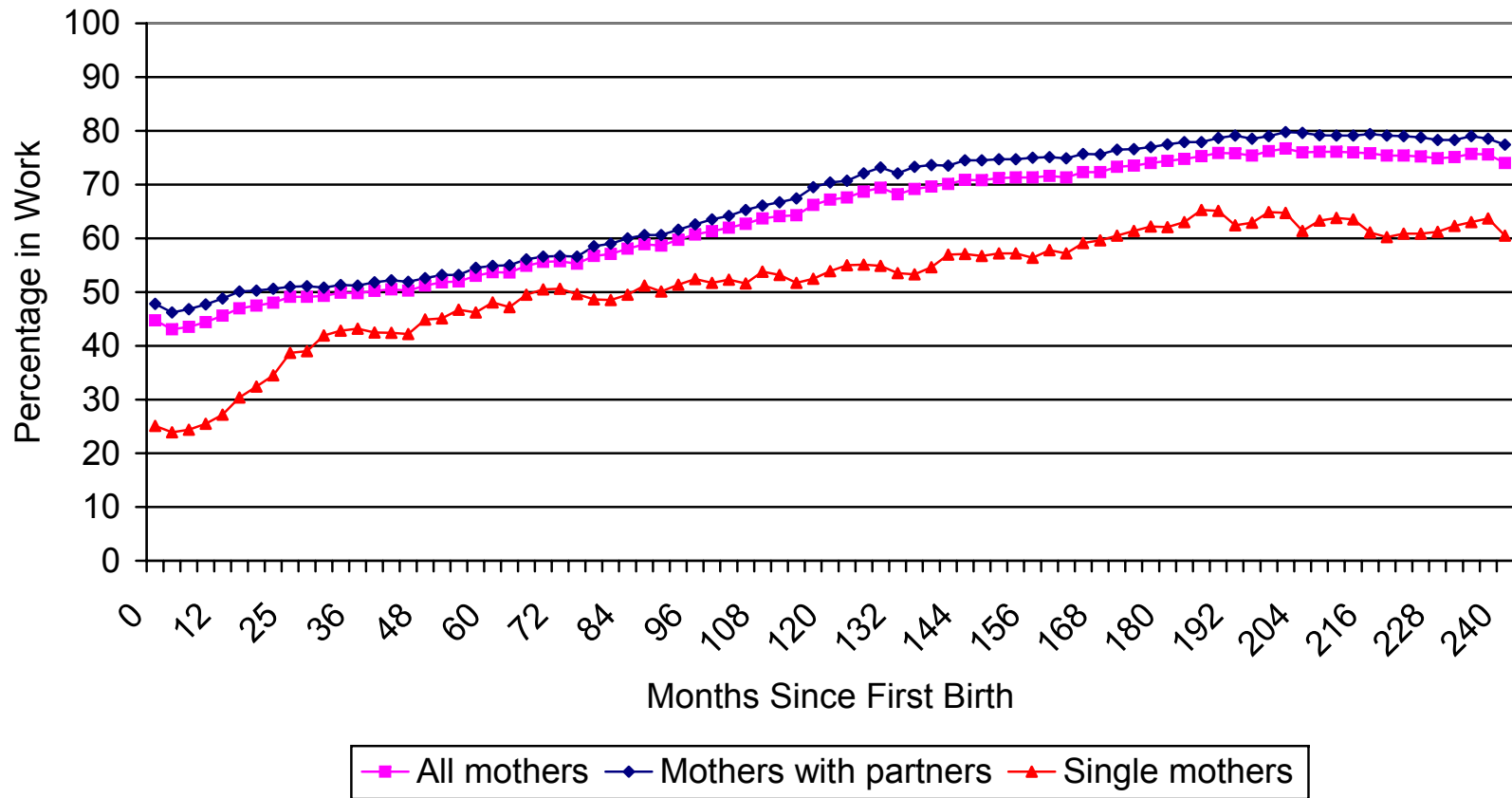


Figure 4.4. Percentage of Mothers in Work By Partnership History

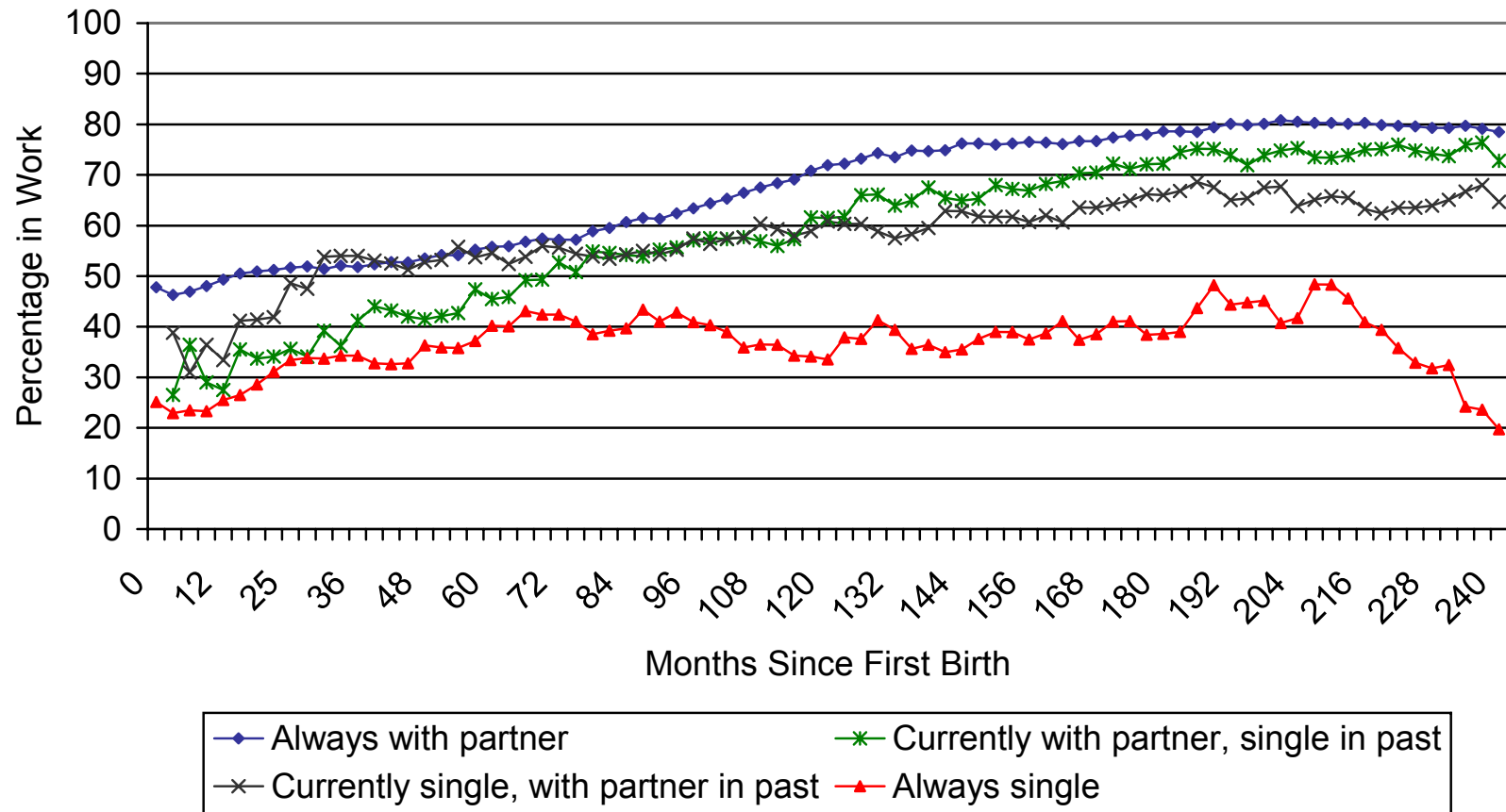


Table 4.1: Number of Partnership and Work Transitions in Five-Year Segments

Percentage of Segments	Number of Partnership Transitions				
Number of Work Transitions	0	1	2	3+	All (row total)
0	45.7	5.8	1.5	0.3	53.4
1	17.4	2.9	1.0	0.3	21.6
2	10.8	1.6	0.8	0.2	13.5
3	4.3	0.9	0.3	0.1	5.5
4	2.4	0.6	0.1	0.1	3.2
5	1.2	0.3	0.0	0.0	1.5
6	0.3	0.1	0.1	0.0	0.4
7	0.3	0.0	0.1	0.0	0.4
8	0.2	0.1	0.0	0.0	0.3
9	0.2	0.0	0.0	0.0	0.2
10	0.0	0.0	0.0	0.0	0.1
Total	82.7	12.4	3.9	1.0	100.0

Table 4.4: Types of transitions within blocks

Transition type	Percentage of blocks of transitions within 12 months of each other
Only partnership transitions	18.0
Only work transitions	73.9
Partner and work transitions	8.2
Total	100.0
Number of blocks	4,182

Table 4.5: Sequences of transitions within blocks containing a partnership transition

	Percentage of blocks containing a partnership transition
<i>Only partnership transitions</i>	68.7
<i>Separation and one work transition:</i>	
- separation → work entry	2.4
- work entry → separation	2.0
- separation /entry in same month	0.3
- separation → work exit	1.2
- work exit → separation	2.0
- separation/exit in same month	0.8
<i>Union and one work transition:</i>	
- union → work entry	2.6
- work entry → union	2.2
- union/entry in same month	0.2
- union → work exit	1.5
- work exit → union	1.3
- union/exit in same month	0.1
<i>3+ transitions including work transitions:</i>	
- partner → work	4.1
- work → partner	2.8
- other sequences	7.6

## (2) Work participation around Partnership Transitions

Consider:

- Mothers' work rates around partnership separations and unions.
- Work exit and entry rates following partnership transitions.
- Comparison with periods when mothers remain continuously partnered or continuously single.
- Differences across calendar time and different types of mothers.

## Main Findings

Partnership changes are important periods for work participation:

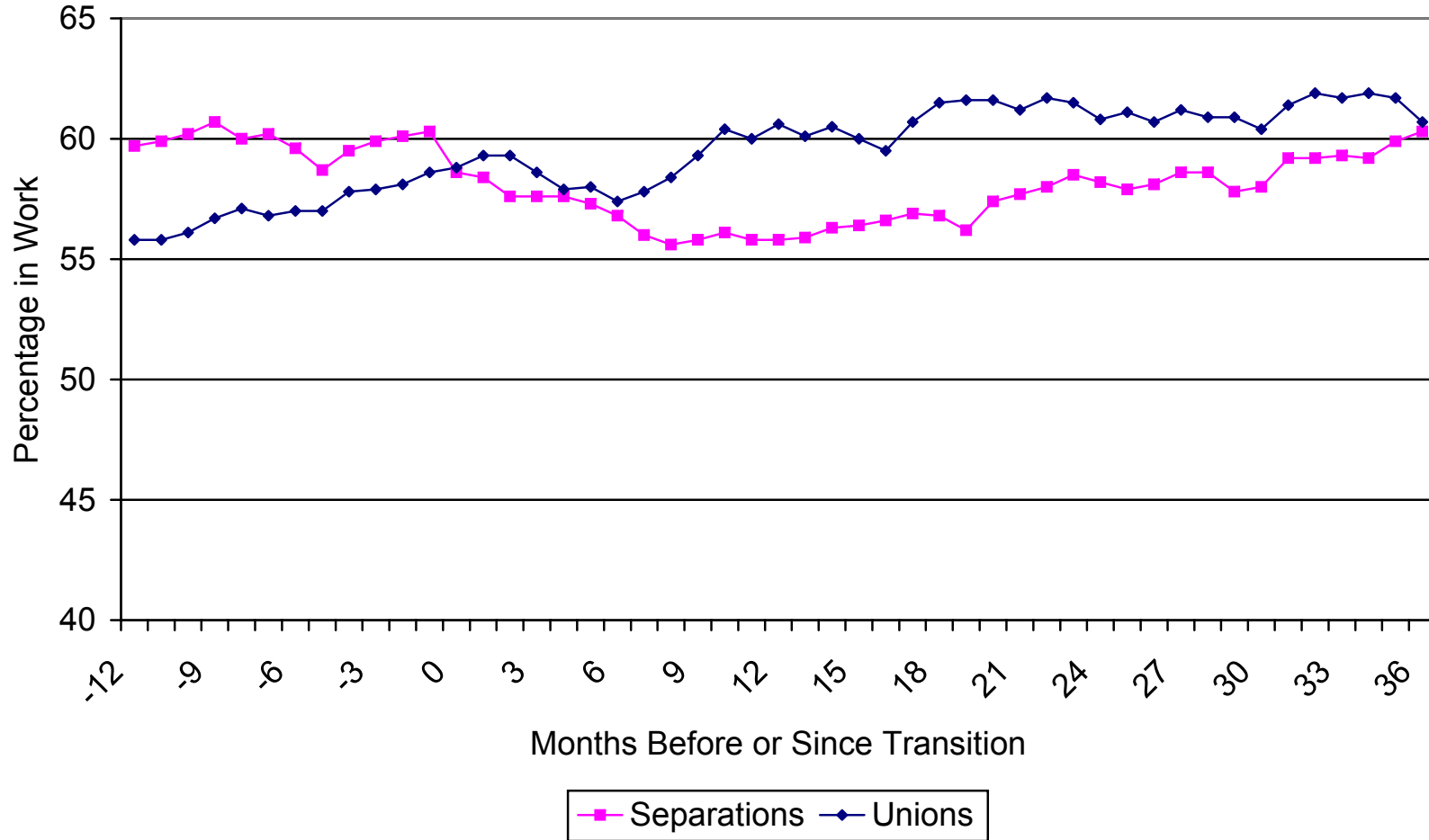
- ❖ Partnership separations are associated with a decline in work participation due to unusually high work exit.
- ❖ Partnership unions are associated with a rise in work participation due to unusually high work entry.

But differences in work participation between lone mothers and mothers with partners may be due to character as well as circumstance:

- ❖ Mothers with partners who subsequently separate are less likely to be working prior to the separation than mothers who remain partnered: the gap in the work rate widens only slightly after the transition.
- ❖ Single mothers who subsequently find a new partner are more likely to be working prior to the union than mothers who remain single: the gap in the work rate does not widen substantially after the transition.



Figure 5.1: Mothers' Work Rates Around Partnership Transitions



Work exit and entry rates around partnership transitions: use hazard models to show:

- monthly exit rate from work spell following partnership transitions.
- monthly entry rate into work (exit from spell not working) following partnership transitions.

Figure 5.6: Monthly Hazard Rates for Exit from Work Following a Partnership Transition

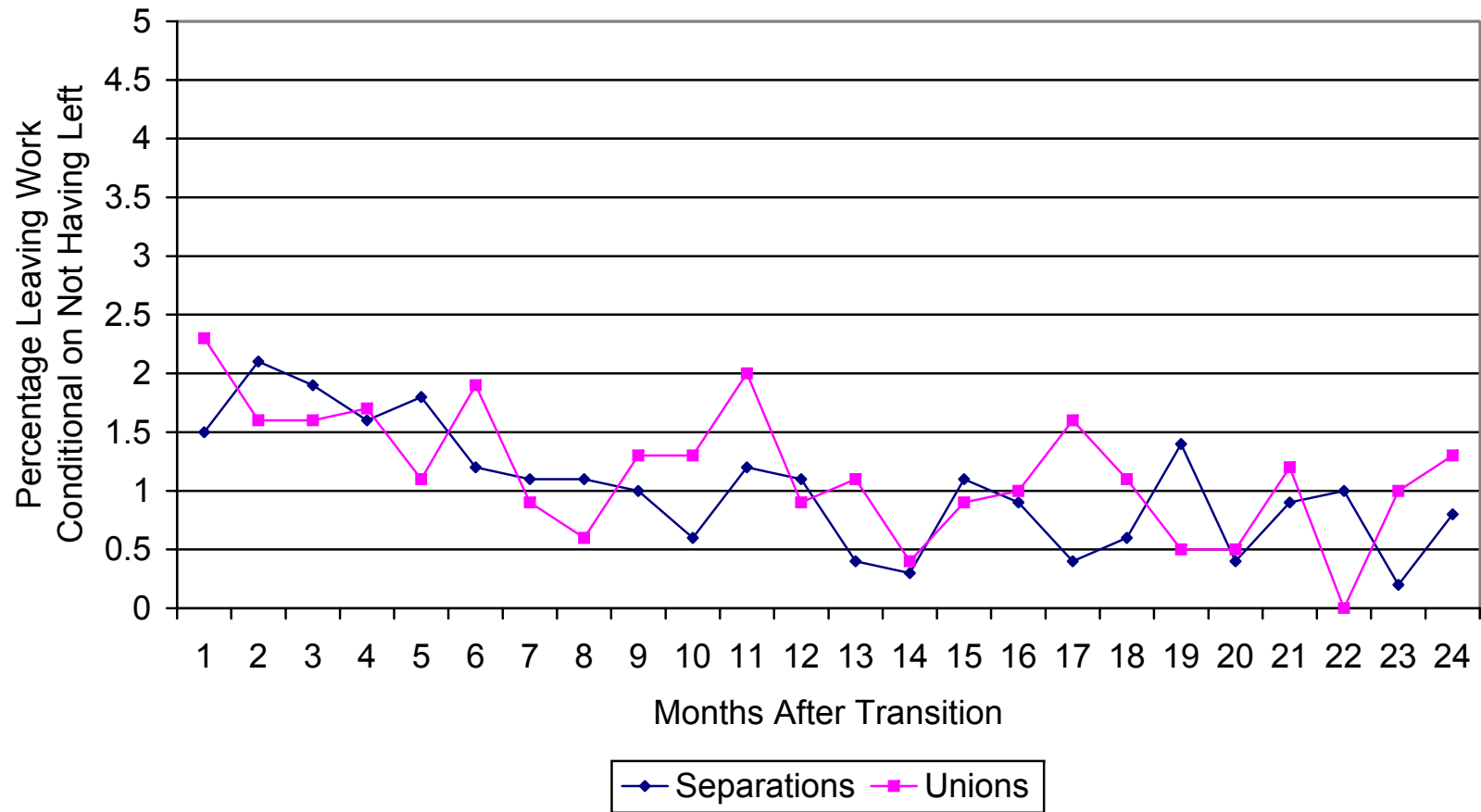
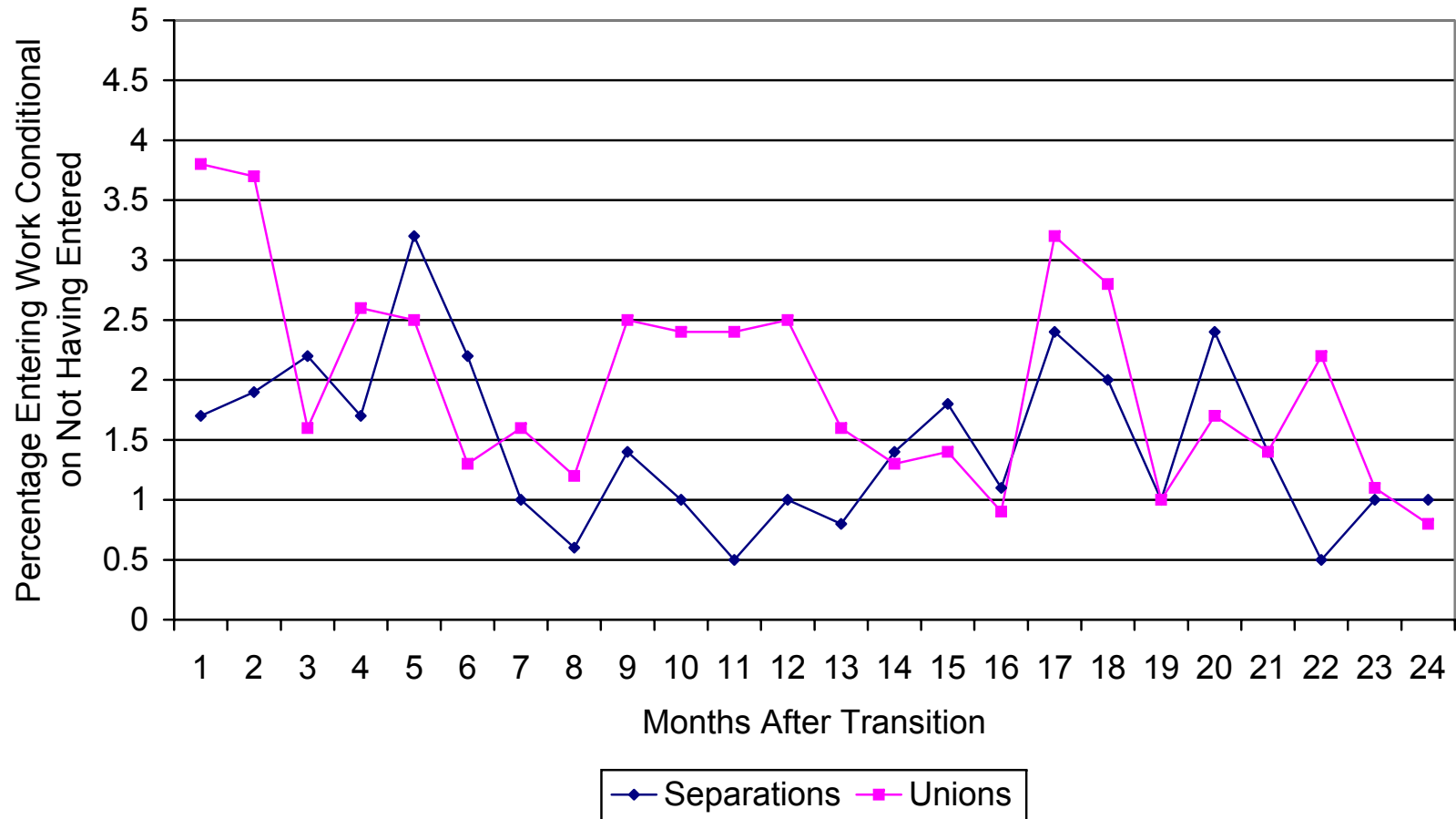


Figure 5.7: Monthly Hazard Rates for Entering Work Following a Partnership Transition



Are changes in work participation unusual during periods with a partnership transition ?

- compare with periods when mothers remain continuously partnered or continuously single.
- consider changes in work participation between interviews one year and two years apart.

Test whether the differences are statistically significant using multinomial regression models.

Test whether the differences can be explained by mothers' observable characteristics by including controls in the regressions for calendar period; family and mother's background characteristics; and, for work exit, work characteristics.

Table 5.2: Work Participation by Change in Partnership

	Partnership Changes Over One Year			
	Partner to partner	Partner to single	Single to single	Single to partner
Percentage in work:				
- at interview prior to transition	69.9	61.2	51.9	55.7
- at interview after transition	71.7	60.8	54.6	60.5
- at second interview after transition	72.8	60.7	57.0	63.0

The proportion of mothers in work:

- increases by an average 1.5 percentage points during years when mothers are continuously partnered
- declines by an average 0.4 percentage points during years with a separation.
- increases by an average of 2.6 percentage points during years when mothers are continuously single
- increases by an average 4.8 percentage points during years with a partnership union.

Table 5.2: Differences in Work Exit for Mothers across Partnership Transition Types

Work exit: proportion out of work at subsequent interview, conditional on being in work at initial interview	Partnership Changes Over One Year			
	Partner to partner	Partner to single	Single to single	Single to partner
One year later	7.4	15.7	9.3	13.2
Two years later	9.0	17.7	11.8	13.0

Mothers separating are significantly more likely than those remaining partnered to leave work:

- over both one year and two years
- not explained by observable characteristics

Mothers finding new partners are significantly more likely than those remaining single to leave work:

- only over the one year period
- explained by differences in observable characteristics between the two groups

Table 5.2: Differences in Work Entry for Mothers across Partnership Transition Types

Work entry: proportion in work at subsequent interview, conditional on being out of work at initial interview	Partnership Changes Over One Year			
	Partner to partner	Partner to single	Single to single	Single to partner
One year later	23.1	23.6	15.6	27.5
Two years later	31.2	26.6	24.5	31.8

There are no significant differences in the rate for work entry between mothers who are separating and those remaining partnered.

Mothers finding new partners are significantly more likely than those remaining single to enter work:

- over both one and two years
- not explained by observable characteristics



On balance:

- The high work exit rate during periods with partnership separations accounts for the decline in aggregate work participation.
- The high work entry rate during periods with partnership unions more than counteracts the initial rise in exit rate to generate an overall increase in aggregate work participation.

Changes over time:

- association between partnership separation and work exit is greater in the pre-1997 period than since 1997
- association between partnership union and work entry greater in the pre-2002 period than since 2002

No strong consistent pattern in the associations across mothers' characteristics.

- mothers with a longer spell of lone motherhood are more likely to enter work during periods with partnership unions
- mothers with three or more children are more likely to exit work during periods with partnership separations
- mothers with a youngest child aged 6 or over are more likely to enter work during periods with either a separation or union
- mothers who move house during the year of separation are more likely to enter work during periods with partnership separations

### (3) Changes in work characteristics around partnership transitions

Consider:

- Changes in mothers' work characteristics for those who remain in work during partnership separations and unions.
- Use same method as above to compare with stable periods and test whether differences are significant using multinomial regression models.

## Main Findings

- ❖ Partnership unions are associated with an unusually high degree of churning in work hours between part-time and full-time work.
- ❖ There are unusually high levels of changes in the type and convenience of work when mothers separate from a partner.
- ❖ There is no evidence that hourly pay is affected by separation from a partner or by the arrival of a new partner.

Table 6.1: Changes in Weekly Work Hours by Change in Partnership

	Partnership changes			
	Partner to partner	Partner to single	Single to single	Single to partner
Average weekly hours at initial interview	26.8	27.8	27.0	27.3
Average change in weekly hours:				
- over one year	0.61	0.11	0.95	1.56
- over two years	1.20	1.31	1.88	1.98
Percentage in full-time work at initial interview	36.5	41.1	39.0	40.8
Percentage of those initially working part-time who move to full-time:				
- over one year	10.0	10.3	11.0	14.8
- over two years	14.4	14.2	15.7	20.1
Percentage of those initially working full-time who move to part-time:				
- over one year	12.6	15.5	9.7	13.9
- over two years	15.1	13.8	11.4	20.4

## Regression models:

- Mothers separating are not significantly more likely than those remaining partnered to change their hours of work.
- Mothers finding new partners are significantly more likely than those remaining single to move in either direction between part-time and full-time work, but there are no marked significant differences in the net impact on average hours.
- Partnership unions are associated with greater churning in hours rather than a single consistent movement.

Table 6.5: Changes in Hourly Pay by Change in Partnership

	Partnership changes			
	Partner to partner	Partner to single	Single to single	Single to partner
Average hourly pay at initial interview	£9.19	£8.40	£8.90	£8.90
Average percentage change in hourly pay:				
- over one year	3.0	8.1	1.5	-0.9
- over two years	5.6	7.9	1.5	-1.1

### Regression models:

- Mothers separating experience significantly higher hourly pay growth than those remaining partnered, but this is explained by differences in the background characteristics of the mothers.
- There are no significant differences in hourly pay growth between mothers who find a new partner and those who remain single.

Mothers separating are more likely than those remaining partnered:

- To change employer, but this is explained by differences in observable characteristics.
- To change the type of work (whether self-employed, occupation or industry) or convenience of work (place of work, time of day worked, commuting time).

Mothers who find a new partner are more likely than those who remain single:

- To change employer and to move into supervisory roles, but these are explained by differences in observable characteristics.



Changes over time:

- no consistent picture in the evolution over time of changes in work characteristics associated with partnership separations or unions

No strong consistent patterns in the associations across mothers' characteristics:

- longer spells of lone motherhood are associated with greater change during unions
- mothers without common natural children with their partner have higher increases in weekly work hours during separations
- mothers with younger children experience greater changes during separations
- mothers who move house during periods with separations experience less change than those who do not move

#### (4) Comparisons with Childless Adults and Fathers

Consider:

- Comparison of associations for mothers with those for childless women, fathers and childless men.
- How associations may be linked to gender or responsibility for children.

## Main Findings

- ❖ Some associations occur for all groups and are due to general factors associated with partnership transitions rather than being specific to being female or to the presence of children:
  - Association between finding a partner and high work entry.
  - Associations between partnership transitions and changes in employer, convenience factors of work and supervisory role.
  
- ❖ Another occurs just for mothers and fathers and appears to be related to the parenthood:
  - Association between separation and a high work exit.
  
- ❖ Others occur just for mothers and childless women and appear to be due to gender rather than the presence of children:
  - Association between separations and unusually high growth in hourly pay and change in the type of work.

Table 7.3: Work Exit across Partnership Changes by Parenthood and Gender

Percentage moving out of work	Mothers	Childless Women	Fathers	Childless Men
Over one year				
(1) Partner to partner	7.3	6.1	3.2	4.0
(2) Partner to single	15.6	7.5	5.6	6.5
(3) Single to single	9.3	6.3	8.3	7.2
(4) Single to partner	13.3	5.5	12.8	3.9
Significant differences across partnership groups	all except (2)-(4)	none	(1)-(2) (1)-(3) (1)-(4)	(1)-(2) (1)-(3) (3)-(4)
Over two years				
(1) Partner to partner	9.1	9.7	4.0	5.6
(2) Partner to single	17.8	9.9	14.3	7.1
(3) Single to single	12.2	7.7	14.8	7.7
(4) Single to partner	13.0	8.1	1.7	6.2
Significant differences across partnership groups	all except (3)-(4)	(1)-(3)	(1)-(2) (1)-(3)	(1)-(3)

Table 7.3: Work Entry across Partnership Changes by Parenthood and Gender

Percentage moving into of work	Mothers	Childless Women	Fathers	Childless Men
<b>Over one year</b>				
(1) Partner to partner	23.1	14.7	28.4	20.8
(2) Partner to single	23.5	34.9	29.7	43.3
(3) Single to single	15.6	19.2	20.0	26.7
(4) Single to partner	27.6	42.2	35.4	52.7
Significant differences across partnership groups	(1)-(3) (1)-(4) (2)-(3) (3)-(4)	all except (2)-(4)	(1)-(3)	all except (2)-(4)
<b>Over two years</b>				
(1) Partner to partner	31.6	19.3	37.6	28.6
(2) Partner to single	26.8	36.9	47.3	40.3
(3) Single to single	24.6	30.1	27.0	36.6
(4) Single to partner	32.1	56.2	38.7	56.4
Significant differences across partnership groups	(1)-(3) (3)-(4)	all except (2)-(3)	(1)-(3) (2)-(3)	(1)-(3) (1)-(4) (3)-(4)

Table 7.5: Change in Hourly Pay across Partnership Changes by Parenthood and Gender

Change in hourly pay	Mothers	Childless Women	Fathers	Childless Men
Over one year				
(1) Partner to partner	3.0	3.0	2.8	2.4
(2) Partner to single	8.1	8.7	3.4	4.0
(3) Single to single	1.5	5.5	-1.1	5.7
(4) Single to partner	-0.9	5.7	-1.4	7.5
Significant differences across partnership groups	all except (3)-(4)	(1)-(2) (1)-(3)	none	(1)-(3) (1)-(4)
Over two years				
(1) Partner to partner	5.6	5.7	5.3	4.8
(2) Partner to single	7.9	11.5	4.4	9.5
(3) Single to single	1.5	11.1	2.7	11.1
(4) Single to partner	-1.1	9.5	-0.9	11.4
Significant differences across partnership groups	(1)-(3) (1)-(4) (2)-(3) (2)-(4)	(1)-(2) (1)-(3) (1)-(4)	none	(1)-(3) (1)-(4)

## Summary of Findings

- Partnership separations and unions are associated with unusual changes in work participation for mothers:
  - separations are associated with unusually high exit rates from work
  - unions are associated with unusually high entry rates into work
- There is an almost equal tendency for work changes to precede or follow partnership changes:
  - causation may run in either direction or both changes be driven by a third factor
- Some work characteristics adjust during partnership changes:
  - unions have high churning between part-time and full-time work
  - separations associated with adjustments in the type and convenience of work
- Partnership changes are not consistently more disruptive for some types of mothers than for other types.

- These associations between partnership transitions and work changes can explain only part of the differences in working patterns between mothers and other adults:
  - partnership changes are rare and most occur in isolation from work changes → explains little
  - association between partnership separation and work exit is observed only for parents and impacts mostly on mothers → explains some of the difference
  
- The evidence suggests that circumstances (the absence of a partner) do not alone explain lone mothers' lower work participation:
  - mothers with partners who subsequently separate are less likely to be in work prior to the separation than those who remain partnered: the initial gap explains much of the difference post-separation
  - single mothers who subsequently find a partner are more likely to be in work prior to the union than those who remain single: the initial gap explains substantial part of the difference post-union  
→ individual characteristics are important as well as circumstance



## Final Conclusions

- A substantial proportion of mothers will separate from a partner or find a new partner while raising children.
- These partnership transitions are associated with changes in work participation and employment characteristics  
→ important for the additional changes in family circumstances at these critical times and for their longer-term impact on the mothers' employment opportunities.
- The next step is to consider whether and how it might be desirable for government policy to influence the changes in mothers' work behaviour during periods of partnership change, either to discourage the negative aspects or to enhance the positive forces.

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