# **Online Appendix**

## **Section A**

Table A1
Departure of Birthweight for Children In Utero During 9/11 Attack
Using Natality Data on Births Conceived before August 14, 2001
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>
Using Various Alternative Methods to Control for Temporal Variation

			Month of Conception							
Birthweight	Observations	Mean	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	June 2001	July 2001	Aug 2001 <sup>2</sup>
Main Analysis	27,552,002	3,323	-1.48	-5.60 ***	-9.70 ***	-7.66 ***	* -10.07	-6.61 ***	-8.40 ***	-15.29 ***
•			(1.21)	(1.21)	(1.21)	(1.23)	(1.21)	(1.19)	(1.19)	(1.72)
Spline - 6 Periods	27,552,002	3,323	1.10	-2.19	-8.77 ***	-10.98 ***	* -6.44 ***	-8.53 ***	-6.54 ***	-14.35 ***
			(1.48)	(1.64)	(1.83)	(2.03)	(2.23)	(2.43)	(2.65)	(3.12)
Spline - 10 Periods	27,552,002	3,323	-2.06	-7.37 **	-7.17	-6.50	-9.99	-10.52	-16.21	-27.17 ***
			(2.39)	(3.42)	(4.51)	(5.63)	(6.75)	(7.87)	(9.01)	(10.22)
Quadratic Trends	27,552,002	3,323	-10.00 ***	-14.09 ***	-17.95 ***	-15.81 ***	* -15.71 ***	-12.28 ***	-14.07 ***	-20.96 ***
			(1.18)	(1.18)	(1.17)	(1.19)	(1.17)	(1.15)	(1.15)	(1.70)
10-month FEs <sup>3</sup>	27,552,002	3,323	-2.23	-6.40 ***	-10.69 ***	-8.77 ***	* -8.61	-5.14 ***	-6.92 ***	-13.95 ***
			(1.32)	(1.32)	(1.32)	(1.34)	(1.32)	(1.30)	(1.30)	(1.80)

#### **Notes:**

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and BOX meaning significant using the Schwarz Criteria.

Each regression controls for temporal trends as indicated in the relevant column header, conception week fixed effects, mother's state of residence fixed effects,

fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender.

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

<sup>&</sup>lt;sup>2</sup>Concieved between August 1, 2001 and August 14, 2001.

<sup>&</sup>lt;sup>3</sup>Oldest conception cohort fixed effect group is only made up of 2 conception months, as the data does not split evenly by groups of 10 conception months.

Table A2
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Natality Data on Births Conceived before August 14, 2001
Excluding Residents of the New York City and Washington D.C. Metropolitan Areas<sup>1</sup>

			Month of Conception							
Birth Outcome	Observations	Mean	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	June 2001	July 2001	Aug 2001 <sup>2</sup>
Birthweight	27,415,768	3,323	-1.49	-5.61 ***	-9.87 ***	-7.64 ***	-10.11 ***	-6.70 ***	-8.51 ***	-15.29 ***
			(1.22)	(1.21)	(1.21)	(1.23)	(1.21)	(1.20)	(1.19)	(1.73)
BW for GA Z-Score	27,415,768	0.00	-0.005 **	-0.001	0.003	0.000	-0.008 ***	-0.010 ***	-0.011 ***	-0.015 ***
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
LBW (<2,500 g)	27,415,768	7.4%	0.09%	0.13% **	0.26% ***	0.38% ***	0.28% ***	0.16% ***	0.19% ***	0.22% ***
			(0.05)	(0.05)	(0.05)	(0.06)	(0.05)	(0.05)	(0.05)	(0.08)
VLBW (<1,500 g)	27,415,768	1.3%	0.04%	0.00%	0.09% ***	0.16% ***	0.19% ***	0.09% ***	0.07% ***	-0.02%
			(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.04)
Preterm (<37 wks)	27,431,784	11.3%	-0.08%	0.51% ***	0.98% ***	0.66% ***	0.35% ***	0.03%	0.16% **	-0.49% ***
			(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.08)
Male	27,431,784	51.2%	0.10%	-0.11%	0.15%	0.05%	0.04%	-0.05%	-0.03%	0.07%
			(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.15)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria. Each regression controls for 16 month conception cohort fixed effects, conception week fixed effects, mother's state of residence fixed effects, fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the conception cohort and mother's state of residence fixed effects.

<sup>&</sup>lt;sup>1</sup>The New York City and Washington D.C. metropolitan areas are defined as the New York, NY Primary Metropolitan Statistical Area and the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA), respectively.

<sup>&</sup>lt;sup>2</sup>Concieved between August 1, 2001 and August 14, 2001.

Table A3
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Natality Data on Births Conceived before August 14, 2001
Excluding Residents of New York City and the Washington D.C. Metropolitan Area

Month of Conception

						Month of Co	псерион			
Birth Outcome	Observations	Mean	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	June 2001	July 2001	Aug 2001 <sup>2</sup>
Birthweight	780,888	3,259	-1.09	-5.24 ***	-9.23 ***	-7.13 ***	-9.41 ***	-6.36 ***	-7.99 ***	-14.73 ***
-			(1.39)	(1.38)	(1.43)	(1.44)	(1.43)	(1.42)	(1.36)	(2.06)
BW for GA Z-Score	780,888	-0.04	-0.004	-0.001	0.004	0.001	-0.007 ***	-0.009 ***	-0.011 ***	-0.015 ***
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
LBW (<2,500 g)	780,888	9.9%	0.07%	0.11% **	0.25% ***	0.37% ***	0.25% ***	0.15% ***	0.18% ***	0.21% **
			(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.09)
VLBW (<1,500 g)	780,888	2.6%	0.03%	-0.01%	0.08% ***	0.15% ***	0.18% ***	0.09% ***	0.06% **	-0.03%
			(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Preterm (<37 wks)	781,490	13.5%	-0.09%	0.50% ***	0.97% ***	0.65% ***	0.33% ***	0.03%	0.15%	-0.49% ***
			(0.08)	(0.08)	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)	(0.09)
Male	781,490	50.4%	0.14%	-0.04%	0.19%	0.09%	0.03%	-0.05%	-0.03%	0.13%
			(1.71)	(1.71)	(1.70)	(1.69)	(1.68)	(1.67)	(1.67)	(2.22)

### Notes:

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates. Data was collapsed such that each cell contains all the individuals from the same county of residence, week of gestation, year of conception, and sex. The regressions are weighted by the number of individuals that are contained in each cell.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria.

Each regression controls for 16 month conception cohort fixed effects, conception week fixed effects, mother's state of residence fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the conception cohort and mother's state of residence fixed effects.

<sup>\*\*</sup> Significant at 5 percent, \*\*\* Significant at 1 percent, **BOX** Significant using the Schwarz Criteria

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

<sup>&</sup>lt;sup>2</sup>Concieved between August 1, 2001 and August 14, 2001.

Table A4
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Collapsed Natality Data on Births Conceived before August 14, 2001
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>
and Controlling for County Level Economic Conditions

						Month of Co	onception			
Birth Outcome	Observations	Mean	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	June 2001	July 2001	Aug 2001 <sup>2</sup>
Birthweight	780,888	3,259	-0.18	-5.86 ***	-10.21 ***	-7.69 ***	-10.82 ***	-7.71 ***	-11.21 ***	-17.23 ***
			(1.41)	(1.39)	(1.45)	(1.45)	(1.45)	(1.46)	(1.40)	(2.09)
BW for GA Z-Score	780,888	-0.04	0.00 **	-0.002	0.002	-0.002	-0.009 ***	-0.012 ***	-0.014 ***	-0.018 ***
			(0.00)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
LBW (<2,500 g)	780,888	9.9%	0.04%	0.12% **	0.26% ***	0.36% ***	0.27%	* 0.18% ***	0.26% ***	0.27% ***
			(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.09)
VLBW (<1,500 g)	780,888	2.6%	0.02%	-0.01%	0.07% **	0.15% ***	0.18%	* 0.09% ***	0.08% ***	-0.02%
			(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Preterm (<37 wks)	781,490	13.5%	-0.16%	0.50% ***	0.99% ***	0.61% ***	0.35% ***	0.06%	0.27% ***	-0.42% ***
			(0.08)	(0.08)	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)	(0.10)
Male	781,490	50.4%	0.12%	-0.05%	0.17%	0.09%	0.00%	-0.06%	-0.06%	0.11%
			(1.73)	(1.73)	(1.72)	(1.70)	(1.70)	(1.70)	(1.70)	(2.25)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates. Data was collapsed such that each cell contains all the individuals from the same county of residence, week of gestation, year of conception, and sex. The regressions are weighted by the number of individuals that are contained in each cell.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria.

Each regression controls for 16 month conception cohort fixed effects, conception week fixed effects, mother's state of residence fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the conception cohort and mother's state of residence fixed effects. Additionally, these regressions contain controls for the unemployment level in the child's county of residence during the 15 months following the estimated conception month, calculated from the Bureau of Labor Statistics, Local Area Unemployment Statistics.

The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

Concieved between August 1, 2001 and August 14, 2001.

Table A5
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Collapsed Natality Data on Births Conceived before August 14, 2001
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>
and Including County Level Fixed Effects

			Month of Conception							
Birth Outcome	Observations	Mean	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	June 2001	July 2001	Aug 2001 <sup>2</sup>
Birthweight	780,888	3,259	-1.18	-5.29 ***	-9.22 ***	-7.17 ***	-9.37 ***	-6.30 ***	-7.84 ***	-14.53 ***
			(1.33)	(1.30)	(1.36)	(1.36)	(1.36)	(1.35)	(1.31)	(1.98)
BW for GA Z-Score	780,888	-0.04	-0.005 **	-0.001	0.004	0.000	-0.007 ***	* -0.009	-0.011 ***	-0.015 ***
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
LBW (<2,500 g)	780,888	9.9%	0.07%	0.11% **	0.24% ***	0.36% ***	0.24%	* 0.15% ***	0.17% ***	0.20% **
			(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.09)
VLBW (<1,500 g)	780,888	2.6%	0.03%	-0.01%	0.07% ***	0.15% ***	0.18%	* 0.09% ***	0.06% **	-0.03%
			(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Preterm (<37 wks)	781,490	13.5%	-0.09%	0.50% ***	0.97% ***	0.65% ***	0.31% ***	* 0.02%	0.13%	-0.51% ***
			(0.08)	(0.08)	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)	(0.10)
Male	781,490	50.4%	0.15%	-0.04%	0.22%	0.09%	0.07%	-0.04%	0.00%	0.18%
			(1.71)	(1.72)	(1.70)	(1.69)	(1.68)	(1.68)	(1.67)	(2.22)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates. Data was collapsed such that each cell contains all the individuals from the same county of residence, week of gestation, year of conception, and sex. The regressions are weighted by the number of individuals that are contained in each cell.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria.

Each regression controls for 16 month conception cohort fixed effects, conception week fixed effects, mother's county of residence fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the conception cohort and mother's county of residence fixed effects.

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

<sup>&</sup>lt;sup>2</sup>Concieved between August 1, 2001 and August 14, 2001.

## **Section B**

Table B1
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Natality Data on Births from January 1, 1995 to May 31, 2002
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

			Month of Birth							
Birth Outcome	Observations	Mean	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002
Birthweight	27,830,257	3,320	-0.05	0.33	-4.19 ***	2.57	-0.37	-7.91 ***	-3.32 **	-8.31 ***
			(1.49)	(1.52)	(1.51)	(1.50)	(1.53)	(1.50)	(1.51)	(1.50)
BW for GA Z-Score	27,549,946	0.00	-0.004	0.001	0.000	0.005	-0.002	-0.009 ***	-0.005 **	-0.014 ***
			(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
LBW (<2,500 g)	27,830,257	7.5%	0.00%	0.00%	0.08%	-0.04%	0.02%	0.21% ***	0.05%	0.19% ***
			(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
VLBW (<1,500 g)	27,830,257	1.4%	0.01%	0.04%	0.05%	0.05%	0.01%	0.09% ***	0.05%	0.07% **
			(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Preterm (<37 wks)	27,566,306	11.5%	-0.02%	0.11%	0.38% ***	0.06%	0.04%	0.20% **	0.07%	0.11%
			(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Male	27,861,010	51.2%	-0.02%	-0.04%	-0.25%	0.06%	-0.08%	-0.13%	-0.11%	-0.10%
			(0.13)	(0.14)	(0.14)	(0.13)	(0.14)	(0.13)	(0.14)	(0.13)

#### **Notes:**

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria. Each regression controls for 16 month birth cohort fixed effects, birth month fixed effects, mother's state of residence fixed effects, fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the birth cohort and mother's state of residence fixed effects.

<sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

Table B2
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Natality Data on Births from January 1, 1995 to May 31, 2002
Excluding Residents of the New York City and Washington D.C. Metropolitan Areas<sup>1</sup>

			Month of Birth							
Birth Outcome	Observations	Mean	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002
Birthweight	27,693,676	3,320	0.15 (1.50)	0.41 (1.52)	-4.17 *** (1.51)	2.54 (1.51)	-0.33 (1.53)	-7.85 *** (1.50)	-3.18 ** (1.52)	-8.22 *** (1.50)
BW for GA Z-Score	27,413,705	0.00	-0.003 (0.003)	0.000 (0.003)	0.000 (0.003)	0.005 (0.003)	-0.002 (0.003)	-0.010 *** (0.003)	-0.005 ** (0.003)	-0.014 *** (0.003)
LBW (<2,500 g)	27,693,676	7.5%	-0.01% (0.07)	-0.01% (0.07)	0.07% (0.07)	-0.05% (0.07)	0.02% (0.07)	0.20% *** (0.07)	0.04% (0.07)	0.18% *** (0.07)
VLBW (<1,500 g)	27,693,676	1.4%	0.01% (0.03)	0.03% (0.03)	0.05% (0.03)	0.05% (0.03)	0.00% (0.03)	0.08% *** (0.03)	0.04% (0.03)	0.06% ** (0.03)
Preterm (<37 wks)	27,430,025	11.5%	-0.02% (0.08)	0.10% (0.08)	0.38% *** (0.08)	0.05% (0.08)	0.04% (0.08)	0.20% ** (0.08)	0.06% (0.08)	0.10% (0.08)
Male	27,724,382	51.2%	0.00%	-0.02%	-0.24%	0.06%	-0.07%	-0.11%	-0.10%	-0.09%
			(0.13)	(0.14)	(0.14)	(0.13)	(0.14)	(0.13)	(0.14)	(0.13)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria. Each regression controls for 16 month birth cohort fixed effects, birth month fixed effects, mother's state of residence fixed effects, fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the birth cohort and mother's state of residence fixed effects.

<sup>1</sup>The New York City and Washington D.C. metropolitan areas are defined as the New York, NY Primary Metropolitan Statistical Area and the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA), respectively.

Table B3
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Collapsed Natality Data on Births from January 1, 1995 to May 31, 2002
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

			Month of Birth							
Birth Outcome	Observations	Mean	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002
Birthweight	329,011	3,218	-0.03 (2.03)	0.76 (1.93)	-3.72 (1.94)	2.89 (1.92)	0.05 (1.94)	-7.31 *** (1.92)	-2.68 (1.96)	-7.97 *** (1.89)
BW for GA Z-Score	280,177	-0.06	-0.004 (0.003)	0.001 (0.003)	0.000 (0.003)	0.005 (0.003)	-0.002 (0.003)	-0.009 *** (0.003)	-0.004 (0.003)	-0.013 *** (0.003)
LBW (<2,500 g)	329,011	11.5%	0.00% (0.08)	-0.01% (0.07)	0.06% (0.07)	-0.05% (0.07)	0.01% (0.08)	0.18% *** (0.07)	0.03% (0.07)	0.18% ** (0.07)
VLBW (<1,500 g)	329,011	3.5%	0.01% (0.03)	0.03% (0.04)	0.04% (0.04)	0.05% (0.03)	0.00% (0.03)	0.07% ** (0.03)	0.04% (0.04)	0.06% (0.03)
Preterm (<37 wks)	280,509	15.4%	-0.03% (0.10)	0.09% (0.10)	0.35% *** (0.10)	0.05% (0.10)	0.03% (0.10)	0.17% (0.10)	0.05% (0.10)	0.10% (0.10)
Male	336,317	50.5%	0.05%	-0.01%	-0.13%	0.03%	-0.04%	-0.17%	-0.10%	-0.12%
			(4.24)	(4.24)	(4.24)	(4.20)	(4.19)	(4.18)	(4.18)	(4.17)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates. Data was collapsed such that each cell contains all the individuals from the same county of residence, month of birth, year of birth, and sex. The regressions are weighted by the number of individuals that are contained in each cell.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria.

Each regression controls for 16 month birth cohort fixed effects, birth month fixed effects, mother's state of residence fixed effects, fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the birth cohort and mother's state of residence fixed effects.

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

Table B4
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Collapsed Natality Data on Births from January 1, 1995 to May 31, 2002
Excluding Residents of New York City and the Washington D.C. Metropolitan Area¹
and Controlling for County Level Economic Conditions

			Month of Birth							
Birth Outcome	Observations	Mean	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002
Birthweight	329,011	3,218	-0.13	0.46	-4.83 **	1.56	-1.85	-9.02 ***	-5.31 ***	-10.36 ***
-			(2.06)	(1.95)	(1.97)	(1.94)	(1.97)	(1.95)	(2.00)	(1.91)
BW for GA Z-Score	280,177	-0.06	-0.004	0.000	-0.002	0.003	-0.005	-0.012 ***	-0.009 ***	-0.017 ***
			(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
LBW (<2,500 g)	329,011	11.5%	0.01%	-0.02%	0.08%	-0.02%	0.05%	0.21% ***	0.08%	0.23% ***
			(0.08)	(0.08)	(0.08)	(0.07)	(0.08)	(0.07)	(0.07)	(0.07)
VLBW (<1,500 g)	329,011	3.5%	0.01%	0.03%	0.05%	0.06%	0.01%	0.07% **	0.04%	0.07%
			(0.04)	(0.04)	(0.04)	(0.03)	(0.03)	(0.04)	(0.04)	(0.03)
Preterm (<37 wks)	280,509	15.4%	-0.04%	0.06%	0.38% ***	0.06%	0.06%	0.20% **	0.09%	0.14%
			(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Male	336,317	50.5%	0.01%	-0.05%	-0.15%	-0.02%	-0.05%	-0.25%	-0.15%	-0.19%
			(4.28)	(4.27)	(4.28)	(4.23)	(4.23)	(4.23)	(4.24)	(4.21)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates. Data was collapsed such that each cell contains all the individuals from the same county of residence, month of birth, year of birth, and sex. The regressions are weighted by the number of individuals that are contained in each cell.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria.

Each regression controls for 16 month birth cohort fixed effects, birth month fixed effects, mother's state of residence fixed effects, fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the birth cohort and mother's state of residence fixed effects. Additionally, these regressions contain controls for the unemployment level in the child's county of residence during the 15 months following the estimated conception month, calculated from the Bureau of Labor Statistics, Local Area Unemployment Statistics.

The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA)

Table B5
Departure of Birth Outcomes for Children In Utero During 9/11 Attack
Using Collapsed Natality Data on Births from January 1, 1995 to May 31, 2002
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>
and Including County Level Fixed Effects

			Month of Birth							
Birth Outcome	Observations	Mean	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002
Birthweight	329,011	3,218	-0.27 (1.68)	0.45 (1.60)	-3.79 ** (1.60)	2.47 (1.63)	-0.28 (1.67)	-7.47 *** (1.62)	-3.01 (1.67)	-8.13 *** (1.65)
BW for GA Z-Score	280,177	-0.06	-0.004 (0.003)	0.001 (0.003)	0.000 (0.003)	0.005 (0.003)	-0.002 (0.003)	-0.009 *** (0.003)	` /	-0.013 *** (0.003)
LBW (<2,500 g)	329,011	11.5%	0.01% (0.07)	-0.01% (0.07)	0.06% (0.07)	-0.04% (0.07)	0.02% (0.07)	0.19% *** (0.07)	0.04% (0.07)	0.18% *** (0.07)
VLBW (<1,500 g)	329,011	3.5%	0.01% (0.03)	0.03% (0.04)	0.04% (0.04)	0.05% (0.03)	0.00% (0.03)	0.07% ** (0.03)	0.04% (0.04)	0.06% (0.03)
Preterm (<37 wks)	280,509	15.4%	-0.01% (0.09)	0.10% (0.09)	0.36% *** (0.09)	0.06% (0.09)	0.04% (0.10)	0.17% (0.09)	0.05% (0.09)	0.09% (0.09)
Male	336,317	50.5%	-0.01%	-0.04%	-0.11%	-0.03%	-0.09%	-0.21%	-0.17%	-0.13%
			(4.25)	(4.25)	(4.25)	(4.21)	(4.20)	(4.19)	(4.19)	(4.18)

Data obtained from National Center of Health Statistics 1995 to 2002 birth certificates. Data was collapsed such that each cell contains all the individuals from the same county of residence, month of birth, year of birth, and sex. The regressions are weighted by the number of individuals that are contained in each cell.

Robust standard errors are in parenthesis with, \*\*, meaning significant at 5 percent, \*\*\*, meaning significant at 1 percent, and **BOX** meaning significant using the Schwarz Criteria.

Each regression controls for 16 month birth cohort fixed effects, birth month fixed effects, mother's county of residence fixed effects for live birth order (8-levels), fixed effects for mother's age (36-levels), fixed effects for mother's education level (18-levels), plurality, mother's diabetes, mother's race (white, black, Hispanic, and other), child's gender, and an interaction of the birth cohort and mother's county of residence fixed effects.

<sup>1</sup>Washington D.C. metropolitan area defined as the Washington Metropolitan Statistical Area (MSA).

Table C1
Summary Statistics
Using Natality Data on Births Conceived in 1995
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes			_
Birthweight	3,649,309	3,328.6	603.8
BW for GA Z-Score	3,649,309	0.00	1.00
LBW (<2,500 g)	3,649,309	7.3%	26.0%
VLBW (<1,500 g)	3,649,309	1.3%	11.5%
Preterm (<37 wks)	3,651,841	11.0%	31.3%
Birth Characteristics			
Male	3,651,841	51.1%	50.0%
Plural	3,651,841	2.7%	16.2%
Live Birth Order	3,634,425	2.0	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	3,651,841	62.3%	48.5%
Mother is Black	3,651,841	14.1%	34.8%
Mother is Hispanic	3,651,841	18.8%	39.0%
Mother had Gestational Diabetes	3,605,246	2.6%	15.8%
Mother is Married	3,651,841	68.4%	46.5%
Mother's Age	3,651,841	26.9	6.1
Mother's Years of Education	3,605,820	12.7	2.8
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	3,585,509	3.9%	19.3%
Maternal Weight Gain	2,886,003	30.6	13.0
Smoking While Pregnant	2,877,443	14.2%	34.9%
Alchohol Use While Pregnant	3,080,884	1.5%	12.0%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.

Table C2
Summary Statistics
Using Natality Data on Births Conceived in 1996
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes			
Birthweight	3,642,373	3,324.2	605.1
BW for GA Z-Score	3,642,373	0.00	1.00
LBW (<2,500 g)	3,642,373	7.4%	26.2%
VLBW (<1,500 g)	3,642,373	1.4%	11.6%
Preterm (<37 wks)	3,644,618	11.2%	31.5%
Birth Characteristics			
Male	3,644,618	51.1%	50.0%
Plural	3,644,618	2.8%	16.5%
Live Birth Order	3,628,759	2.0	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	3,644,618	61.7%	48.6%
Mother is Black	3,644,618	14.3%	35.0%
Mother is Hispanic	3,644,618	19.2%	39.4%
Mother had Gestational Diabetes	3,602,681	2.6%	15.9%
Mother is Married	3,644,618	68.2%	46.6%
Mother's Age	3,644,618	26.9	6.2
Mother's Years of Education	3,598,164	12.7	2.8
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	3,578,981	3.8%	19.0%
Maternal Weight Gain	2,896,267	30.7	13.1
Smoking While Pregnant	2,888,771	13.7%	34.4%
Alchohol Use While Pregnant	3,091,965	1.2%	11.1%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.

Table C3
Summary Statistics
Using Natality Data on Births Conceived in 1997
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes			_
Birthweight	3,693,318	3,322.1	607.1
BW for GA Z-Score	3,693,318	0.01	1.00
LBW (<2,500 g)	3,693,318	7.5%	26.3%
VLBW (<1,500 g)	3,693,318	1.4%	11.8%
Preterm (<37 wks)	3,695,823	11.5%	31.9%
Birth Characteristics			
Male	3,695,823	51.2%	50.0%
Plural	3,695,823	2.9%	16.9%
Live Birth Order	3,673,843	2.0	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	3,695,823	61.5%	48.7%
Mother is Black	3,695,823	14.4%	35.1%
Mother is Hispanic	3,695,823	19.2%	39.4%
Mother had Gestational Diabetes	3,646,827	2.6%	15.9%
Mother is Married	3,695,823	67.7%	46.8%
Mother's Age	3,695,823	27.0	6.2
Mother's Years of Education	3,644,091	12.8	2.7
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	3,624,001	3.8%	19.1%
Maternal Weight Gain	2,950,503	30.8	13.3
Smoking While Pregnant	2,941,712	13.5%	34.2%
Alchohol Use While Pregnant	3,146,314	1.1%	10.6%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.

Table C4
Summary Statistics
Using Natality Data on Births Conceived in 1998
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes		_	_
Birthweight	3,721,401	3,320.0	607.5
BW for GA Z-Score	3,721,401	0.01	1.00
LBW (<2,500 g)	3,721,401	7.5%	26.4%
VLBW (<1,500 g)	3,721,401	1.4%	11.8%
Preterm (<37 wks)	3,723,612	11.7%	32.1%
Birth Characteristics			
Male	3,723,612	51.2%	50.0%
Plural	3,723,612	3.0%	17.2%
Live Birth Order	3,706,132	2.0	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	3,723,612	60.9%	48.8%
Mother is Black	3,723,612	14.2%	35.0%
Mother is Hispanic	3,723,612	19.8%	39.8%
Mother had Gestational Diabetes	3,665,486	2.7%	16.2%
Mother is Married	3,723,612	67.4%	46.9%
Mother's Age	3,723,612	27.0	6.2
Mother's Years of Education	3,668,687	12.8	2.7
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	3,644,792	3.7%	18.8%
Maternal Weight Gain	2,973,738	30.7	13.5
Smoking While Pregnant	3,142,480	13.1%	33.8%
Alchohol Use While Pregnant	3,172,958	1.1%	10.2%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.

Table C5
Summary Statistics
Using Natality Data on Births Conceived in 1999
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes			_
Birthweight	3,793,392	3,318.7	606.1
BW for GA Z-Score	3,793,392	0.01	1.00
LBW (<2,500 g)	3,793,392	7.5%	26.4%
VLBW (<1,500 g)	3,793,392	1.4%	11.8%
Preterm (<37 wks)	3,795,408	11.7%	32.2%
Birth Characteristics			
Male	3,795,408	51.2%	50.0%
Plural	3,795,408	3.1%	17.3%
Live Birth Order	3,780,747	2.1	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	3,795,408	59.8%	49.0%
Mother is Black	3,795,408	14.3%	35.0%
Mother is Hispanic	3,795,408	20.5%	40.4%
Mother had Gestational Diabetes	3,741,404	2.8%	16.6%
Mother is Married	3,795,408	67.3%	46.9%
Mother's Age	3,795,408	27.1	6.2
Mother's Years of Education	3,741,484	12.8	2.8
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	3,713,637	3.7%	18.9%
Maternal Weight Gain	3,044,595	31.0	13.6
Smoking While Pregnant	3,258,742	12.8%	33.4%
Alchohol Use While Pregnant	3,250,862	1.0%	9.7%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.

Table C6
Summary Statistics
Using Natality Data on Births Conceived in 2000
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes			
Birthweight	3,804,293	3,310.5	603.5
BW for GA Z-Score	3,804,293	0.00	0.99
LBW (<2,500 g)	3,804,293	7.6%	26.5%
VLBW (<1,500 g)	3,804,293	1.4%	11.8%
Preterm (<37 wks)	3,806,177	11.8%	32.3%
Birth Characteristics			
Male	3,806,177	51.1%	50.0%
Plural	3,806,177	3.1%	17.4%
Live Birth Order	3,793,445	2.1	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	3,806,177	59.3%	49.1%
Mother is Black	3,806,177	14.1%	34.8%
Mother is Hispanic	3,806,177	21.1%	40.8%
Mother had Gestational Diabetes	3,765,549	3.1%	17.2%
Mother is Married	3,806,177	66.9%	47.1%
Mother's Age	3,806,177	27.2	6.2
Mother's Years of Education	3,754,928	12.8	2.8
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	3,727,157	3.6%	18.7%
Maternal Weight Gain	3,068,694	30.9	13.7
Smoking While Pregnant	3,279,170	12.5%	33.1%
Alchohol Use While Pregnant	3,272,137	0.9%	9.4%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.

Table C7
Summary Statistics
Using Natality Data on Births Conceived before August 14, 2001
Excluding Residents of New York City and the Washington D.C. Metropolitan Area<sup>1</sup>

	Observations	Mean	Std. Dev.
Birth Outcomes		_	
Birthweight	2,276,282	3,300.1	605.2
BW for GA Z-Score	2,276,282	-0.01	0.99
LBW (<2,500 g)	2,276,282	7.8%	26.9%
VLBW (<1,500 g)	2,276,282	1.5%	12.0%
Preterm (<37 wks)	2,277,412	11.9%	32.3%
Birth Characteristics			
Male	2,277,412	51.2%	50.0%
Plural	2,277,412	3.3%	18.0%
Live Birth Order	2,271,668	2.1	1.2
Maternal Characteristics			
Mother is Non-Hispanic White	2,277,412	58.8%	49.2%
Mother is Black	2,277,412	14.1%	34.8%
Mother is Hispanic	2,277,412	21.5%	41.1%
Mother had Gestational Diabetes	2,260,945	3.2%	17.6%
Mother is Married	2,277,412	66.5%	47.2%
Mother's Age	2,277,412	27.2	6.2
Mother's Years of Education	2,248,814	12.9	2.8
Mother's Pregnancy Behavior			
Late/No Prenatal Care <sup>2</sup>	2,237,722	3.6%	18.7%
Maternal Weight Gain	1,852,065	31.0	13.8
Smoking While Pregnant	1,970,252	12.3%	32.8%
Alchohol Use While Pregnant	1,966,250	0.9%	9.4%

<sup>&</sup>lt;sup>1</sup>The Washington D.C. metropolitan area is defined as the Washington, DC-MD-VA-WV Primary Metropolitan Statistical Area (PMSA).

<sup>&</sup>lt;sup>3</sup>Late/No prenatal care defined as either starting prenatal care in the 3rd trimester or never receiving prenatal care.