

Appendix F

Tables and Charts Related to the Assessment of Uncertainty in the Model

Table F.1. Comparison of Key Regression Coefficients Using Bayesian and REML Methods to Estimate the Hierarchical Model Parameters in the Purity Model

| Drug | Quantity Level | Number of Observations | Posterior Mean Estimate of Coefficient on Amount | REML-Based Estimate of Coefficient on Amount |
|----------------|----------------|------------------------|--|--|
| Heroin | 1 | 12,865 | -1.967 (1.779) | -2.1277 (1.7540) |
| Powder cocaine | 1 | 6,056 | -0.4793 (0.6345) | -0.7726 (0.6807) |

Table F.2. Comparison of Key Regression Coefficients Using Bayesian and REML Methods to Estimate the Hierarchical Model Parameters in the Price Model

| Drug | Quantity Level | Number of Observations | Posterior Mean Estimate of Coefficient on log(pure amount) | REML-Based Estimate of Coefficient on log(pure amount) |
|----------------|----------------|------------------------|--|--|
| Powder cocaine | 1 | 12,711 | 0.5281 (0.03461) | 0.5268 (0.03013) |
| Heroin | 1 | 6,122 | 0.7054 (0.02731) | 0.7091 (0.01870) |

Figure F.1
**50 and 95 Percent Posterior Probability Intervals of the National Price Index for Powder Cocaine, Quantity Level 1,
Employing Bayesian Model**

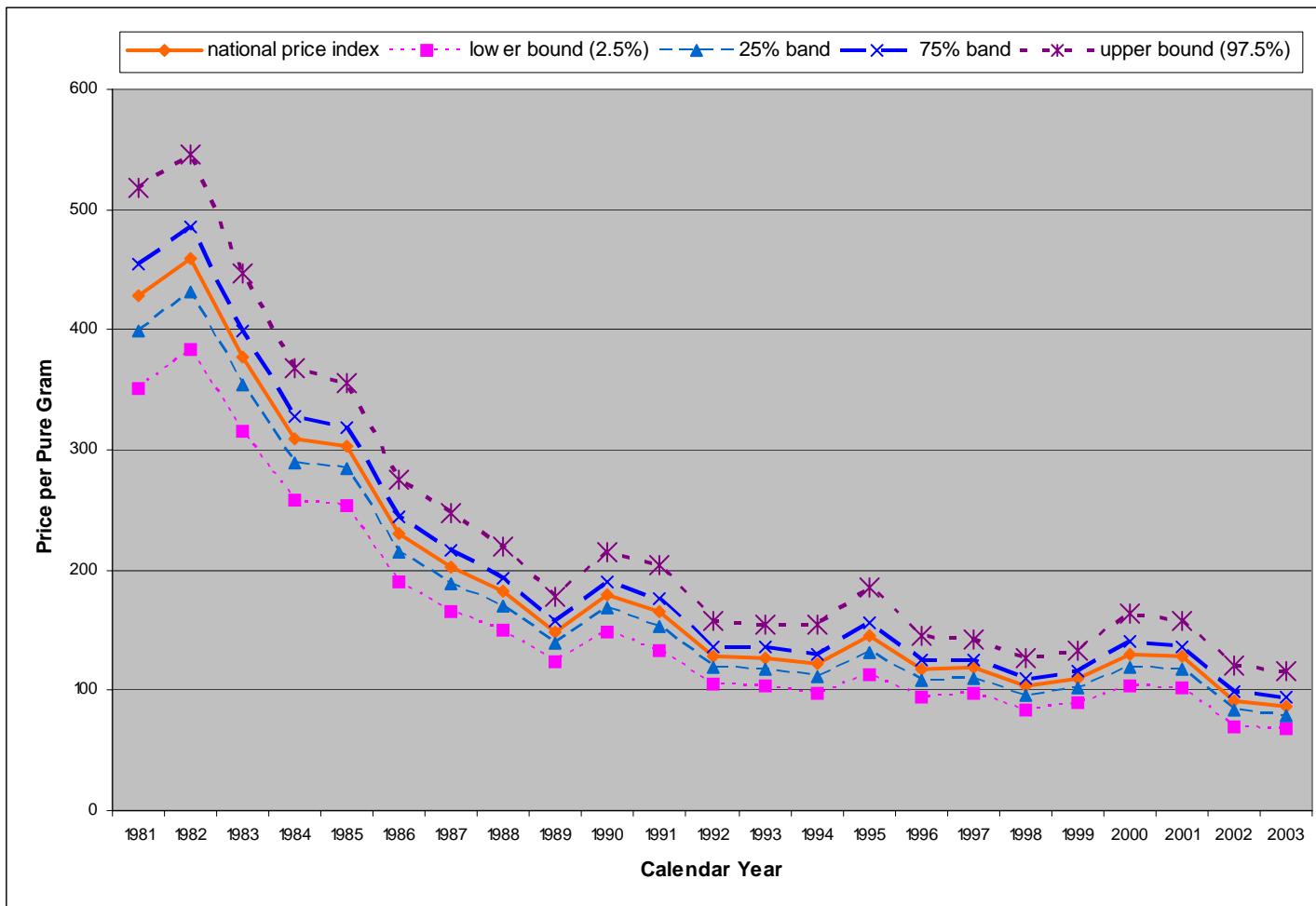


Figure F.2
50 and 95 Percent Posterior Probability Intervals of the National Price Index for Heroin, Quantity Level 1, Employing Bayesian Model

