Measurement of quality changes has proven to be an especially difficult aspect of calculating unbiased rates of inflation. We propose a new methodology of capturing quality improvements based on consumer focus groups and apply this methodology in an environment where quality changes might be expected to be especially rapid and extensive, a post-Communist transition economy. We find that the methodology indicates a substantial understatement of quality improvements during transition, and, therefore, a substantial overstatement of inflation, resulting in a serious downward bias in growth rate estimates for post-Communist economies. The move to free markets has apparently improved consumers' welfare more by improving what they can purchase than by increasing how much they can purchase. Overall, mismeasurement of quality changes may have understated Czech growth rates during the first decade after Communism by as much as 5 percentage points per year.