

To hold class probabilities equal across time in an LTA, the probability parameterization together with Model Constraint can be used as shown below. Note that p1 and p2 are the probabilities of the first two classes of the latent class variable at time 1. See also the description of the probability parameterization at the end of Chapter 14 in the User's Guide.

```
CLASSES = c1 (3) c2 (3);
```

```
ANALYSIS:
```

```
TYPE = MIXTURE;
```

```
ESTIMATOR = MLR;
```

```
parameterization = probability;
```

```
MODEL:
```

```
%OVERALL%
```

```
c2#1 ON c1#1 (p11);
```

```
c2#2 ON c1#1 (p21);
```

```
c2#1 ON c1#2 (p12);
```

```
c2#2 ON c1#2 (p22);
```

```
c2#1 ON c1#3 (p13);
```

```
c2#2 ON c1#3 (p23);
```

```
[c1#1] (p1); [c1#2] (p2); ![c1#3] (p3);
```

```
MODEL c1:
```

```
%C1#1%
```

```
[y1-y3] (m1-m3);
```

```
%C1#2%
```

[y1-y3] (m4-m6);

%C1#3%

[y1-y3] (m7-m9);

MODEL c2:

%C2#1%

[y1-y3] (m1-m3);

%C2#2%

[y1-y3] (m4-m6);

%C2#3%

[y1-y3] (m7-m9);

MODEL CONSTRAINT:

$$0 = p11*p1 + p12*p2 + p13*(1-p1-p2)-p1;$$

$$0 = p21*p1 + p22*p2 + p23*(1-p1-p2)-p2;$$